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THE REPORT

OF THE

PRESIDENT

OF

QUEEN'S COLLEGE, CORK,

FOR

THE YEAR ENDING 31ST MARCH, 1868;

TOGETHER WITH APPENDICES A TO K INCLUSIVE.

108776

Presented to both Houses of Parliament by Command of Her Majesty.

DUBLIN:
PRINTED BY ALEXANDER THOM, 87 & 88, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.

1868.

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THE REPORT

OF THE

PRESIDENT OF QUEEN'S COLLEGE, CORK,

FOR

THE YEAR ENDING 31ST MARCH, 1868.

TO THE QUEEN'S MOST EXCELLENT MAJESTY.

MAY IT PLEASE YOUR MAJESTY,

In accordance with the requirements of the Act of Parliament, and of the Charters of the Queen's Colleges, I have the honour to submit the following Report of the Progress and Condition of this College for the year ending 31st March, 1868.

1. EXAMINATIONS FOR ENTRANCE—NUMBERS AND CLASSIFICATIONS OF STUDENTS.

The Entrance Examinations for the Session now current were held in October, 1867, on the several days as arranged by the College Council. The regulations on the subject are given in the Prospectus for the Session of which a copy is annexed, forming Appendix A.

After those examinations 79 new Students were entered as Matriculated Students to the First Year's Class, as were also 9 who had already attended some classes as Non-matriculated Students, and had now passed the examinations, making 88 of new Matriculated Students. Further, 16 Students who had previously matriculated, but who from not having been promoted, or from other reasons, had resumed the studies of the first year, being added to the above, made the total number of Students in that class in the current Session 104.

In addition to the above, there presented themselves to proceed with the studies of the senior years, 131 students who had passed the Sessional Examination at the close of the previous academic

year. The total number of Matriculated Students attending the College during the current Session is, therefore, 235.

Besides the above 235 Matriculated Students, there entered to attend the lectures of particular professors 12 Non-Matriculated Students, making the total number of Students in attendance in the College during this Session to be 247.

Those Students are classified according to their collegiate standing in the following table, which also shows, for sake of comparison, the similar return for the preceding Session.

Courses of Study in order of College standing.		Session, 1866–67.	Session, 1867–68.
Matriculated Students,	Course of First Year,	85	104
	Course of Second Year,	43	52
	Course of Third Year,	52	41
	Course of Fourth Year,	27	32
	Special Courses,	7	6
Total number of Matriculated Students,		214	235
Non-Matriculated Students,		16	12
Total number of Students,		230	247

In regard to Faculties and courses of studies for University Diplomas and Degrees, the Classification of Students who attended the College during the present Session (1867-68) was as follows:—

	Matriculated.	Non-Matriculated.	Total.
In the Faculty of Arts,	66	2	68
In the Faculty of Law,	15	–	15
In the Faculty of Medicine,	140	10	150
In the Faculty of Engineering,	28	–	28
Total,	249	12	261

This total number exceeds that given above as the total number of Matriculated Students by 14, as so many had entered more than one Faculty to attend lectures in this Session. There thus entered in the Faculties of—

Arts and Law,	6
Arts and Medicine,	7
Medicine and Law,	1
Making total	14

The ages of the new Students entered for the Session 1867-68, were as follows:—

14 Years,	1	18 Years,	13	No return from those already in College as Non-Matriculated,	9
15 Years,	4	19 Years,	9		
16 Years,	15	20 Years,	9		
17 Years,	14	21 Years and over,	14	Total,	88

Of the total number of Matriculated Students (235) on the roll for the Session 1867-68, there were 164 under 21 years of age, and 71 were 21 years of age and upwards.

2. College Examinations for Sessional Promotion of Students from the Session 1866-67, and for Scholarships in the Session 1867-68.

The Examinations for Sessional Promotion were held at the end of the Session of 1866-67, with the results shown in the following table:—

Faculty.	Promoted.	Not Promoted.	Total.
Arts,	41	13	54
Law,	7	—	7
Engineering,	26	13	39
Total,	74	26	100
Fourth Year's Arts, Faculty of Medicine, Not requiring Promotion,			4 117
Total,			221

Those examinations were conducted by means of printed papers, of which a selection is given in Appendix B, and prizes were awarded to those Students who were specially recommended to the College Council by the examining Professors. The names of the Students who received Sessional honors and prizes are given in Appendix C.

The Examinations for Scholarships were held in the commencement of the Session of 1867-68, as usual, under the direction of the College Council, with the following results.

Of the 7 Senior Scholarships in Arts 6 were awarded.
The Senior Scholarship in Law was awarded.
Of the 30 Junior Scholarships in Arts 21 were awarded.
Of the 8 Scholarships in Medicine 5 were awarded.
Of the 3 Junior Scholarships in Law all were awarded.
Of the 5 Scholarships in Engineering all were awarded.

The Examinations for these Scholarships were conducted principally by printed papers. The subjects of examination are described in the Prospectus (Appendix A), and the more important papers of questions are given in Appendix D.

3. Courses of Instruction.

The particulars of the Classes, the numbers of lectures delivered by each Professor, and the number of Students attending each class in the Session 1864-65, are given in the Table, Appendix E, and further details as to the special departments will be found in the Reports of the Professors annexed, forming Appendix F.

4. Queen's University Examinations and Peel Exhibitions.

The Students who had completed their collegiate courses were recommended to the Senate of the Queen's University to be examined for their respective Diplomas and Degrees. The names of those Students of Queen's College, Cork, who obtained Degrees

or Diplomas at the University Examinations in June and October, 1867, and also those who obtained University honors at those Examinations, are given in Appendix G.

At the close of the First University Examination in Arts in October, 1867, 8 Students passed, of whom 3 passed with first-class, and 5 with third-class honors, and in the department of Engineering 2 passed, 1 with first-class honors, and one unclassed.

The following Exhibitions from the Peel Endowment Fund were awarded at these examinations to Students of Queen's College, Cork:—

Joseph O'Brien, first, obtained £20 per year for two years.
Thomas Rearden, second, obtained £15 per year for three years.

5. Competitive Examinations and Civil Service Appointments. Special College Prize.

At the Competitive Civil Service Examinations held in 1867, the following Students of Queen's College, Cork, obtained appointments in the public service:—

Thomas Horan, Civil Service, India.
John O'Driscoll, Student Interpreter in China, India, and Japan.
James M'Martin, Public Works, India.
Robert Rings, do. do.
Francis Martin, do. do.
Robert D. Corbett, 1st place, Army Medical Service.
Frederick Lyon, Army Medical Service.
John Newman, do. do.
John Barry, do. do.
Roslewin Morgan, do. do.
Hickman Morgan, do. do.
Mathew W. Galway, do. do.
Edward Fitzgerald, do. do.
Mark Anthony, do. do.
William H. Garde, do. do.
Michael Molony, Irish Record Office.

6. Library and Museums.

The special Report of the Librarian will be found in Appendix I; and for explanations of the condition and progress of the several Museum departments, reference may be made to the Reports of the Professors (Appendix F), to whose charge those special departments are committed.

7. Finance of the College.

I have the honour to annex copies of the College accounts as annually furnished to the Audit Office by the Bursar of the College, and also of the mode of distribution of the Parliamentary Grant for the year closing 31st March, 1868, forming Appendix K, Nos. 1 and 2.

8. Conduct and Discipline of the Students.

I have to report that during the past year the conduct of the Students of Queen's College, Cork, has been very satisfactory, no breach of discipline requiring the notice of the College Council having occurred. In reference to the moral and religious conduct

of the Students under 21 years of age resident in Licensed Boarding Houses, I have the honour to submit the Reports of the Deans of Residences, forming Appendix L.

With respect to the proportions of the several religious denominations of the Students recently entered, the following table gives the numbers for the last and the current Sessions:—

Religious Denominations.	1867-68.			1866-67.		
	Matriculated.	Non-Matriculated.	Total.	Matriculated.	Non-Matriculated.	Total.
Roman Catholic,	32	3	35	30	7	37
Anglican,	40	6	46	24	9	33
Presbyterian,	3	–	3	2	–	2
Wesleyan,	2	–	2	2	–	2
Other Minor Denominations,	2	–	2	2	–	2
Total,	79	9	88	60	16	76

The following table gives the religious denominations of all the Students now in attendance at Queen's College, Cork (Session 1867-68) to 31st March, 1868:—

Religious Denominations.	Matriculated.	Non-Matriculated.	Total.
Roman Catholic,	107	4	111
Anglican,	110	8	118
Presbyterian,	7	–	7
Wesleyan,	8	–	8
Other Denominations,	3	–	3
Total,	235	12	247

The increase of Matriculated Students in the current Session over that of the last is, therefore, 21, and on the whole body of Students is 17.

Signed,

ROBERT KANE,

President of Queen's College, Cork.

Queen's College, Cork,
May, 1868.

APPENDIX.

APPENDIX A.

GENERAL REGULATIONS of the COLLEGE.—LIST of OFFICERS.—PROGRAMME of COURSES for MATRICULATION and SCHOLARSHIP.—HOURS of LECTURE.—COURSES for the PUBLIC SERVICE and COMPETITIVE EXAMINATIONS.—QUEEN'S UNIVERSITY EXAMINATIONS.

QUEEN'S UNIVERSITY IN IRELAND—QUEEN'S COLLEGE, CORK.

Faculties of Arts, Medicine, and Law.—Session 1868–69.

President—SIR ROBERT KANE, F.R.S., M.R.I.A.

Vice-President—JOHN RYALL, LL.D.

Professors.

The Greek Language,	JOHN RYALL, LL.D.
The Latin Language,	BUNNELL LEWIS, M.A., F.S.A.
Mathematics,	CHARLES NIVEN, B.A.
Natural Philosophy,	JOHN ENGLAND, M.A.
History and English Literature,	WILLIAM RUSHTON, M.A.
Logic and Metaphysics,	GEORGE SIDNEY READ, M.A.
Chemistry,	JOHN BLYTH, M.D.
Natural History,	JOSEPH REAY GREENE, B.A., M.D.
Geology and Mineralogy,	ROBERT HARKNESS, F.R.S.S.L. & E., F.G.S.
Modern Languages,	RAYMOND DE VERICOUR, M.A.
Jurisprudence and Political Economy,	RICHARD HORNER MILLS, M.A.
English Law,	MICHAEL BARRY, M.R.I.A.
Anatomy and Physiology,	J. HENRY CORBETT, M.D., L.R.C.S.I.
Medicine,	DENIS C. O'CONNOR, B.A., M.D.
Surgery,	WILLIAM K. TANNER, M.D., F.&L.R.C.S.I.
Materia Medica,	PURCELL O'LEARY, B. es L., M.A., M.D., F.B.S.
Midwifery,	JOSHUA R. HARVEY, B.A., M.D.
Engineering,	ALEXANDER JACK, M.A.
Celtic Languages,	OWEN CONNELLAN, Esq.

Officers.

Registrar,	ROBERT JOHN KENNY, Esq.
Bursar,	EDWARD M. FITZGERALD, Esq.
Librarian,	MATTHIAS O'KEEFFE, M.A., M.D.

The College Session, 1868–69.

The *First Term* will commence on the 20th of October, 1868, and end on the 19th of December.

The *Second Term* will commence on the 4th of January, 1869, and end on the 20th of March.

The *Third Term* will commence on the 5th of April, 1869, and end with the Session, on the 12th of June.

Appendix A.

General Regulations of College, &c.

SUBJECTS OF THE MATRICULATION EXAMINATIONS.

For the Faculties of Arts, Medicine, and Law.

Greek:

Grammar.

Any one of the following Authors which the Candidate may select:—

Homer—Iliad, Books I. and II.
Xenophon—Anabasis, Books I. and II.
Lucian—Walker's Selections.

Latin:

Any one of the following Authors which the Candidate may select:—

Virgil—Æneid, Books I. and II.
Sallust—Conspiracy of Catiline.
Cæsar—Gallic War, Book I.

English:

Grammar—

(1.) The principles of Etymology and Orthography.
(2.) The leading Rules of Syntax.

Composition, and writing from dictation.

Outlines of Grecian History to the death of Alexander the Great.
Outlines of Roman History to the accession of Augustus.
Outlines of Ancient and Modern Geography.

Mathematics:

Arithmetic—Principles of Notation. Vulgar and Decimal Fractions. Definition of the terms, Ratio and Proportion. The Rule of Proportion, with its commercial applications, including Simple Interest.
Algebra—Explanation of the signs and meaning of an Index. Calculation of the values of Algebraical Expressions, when particular values are given to the letters which they involve.
Euclid—Book I., with the definitions and axioms.

N.B.—The Easter Recess for the Medical Faculty will commence on the Tuesday before Easter, and end on Easter Monday.

For the Department of Civil Engineering.

The outlines of Modern Geography; Grammar.

Mathematics—Arithmetic, Principles of Notation, Vulgar and Decimal Fractions, with the reasons of the different rules. Rule of Proportion, with its commercial applications; Extraction of the Square Root, both of whole numbers and decimals.
Algebra—Explanation of the signs and meaning of an Index, calculation of the value of Algebraic expressions, when particular values are given to the letters which they involve.
Euclid—Books I., II., III., IV., and VI., with the definitions of Book V.

MATRICULATED STUDENTS.

Persons intending to become *Matriculated* Students of the College, in any of the Faculties or Departments of Faculty, are required to pass the Matriculation Examination, whereby they are declared competent to pursue the course of study prescribed to Students in that Faculty or Department of Faculty, and, on completing this course, are entitled to become Candidates for the Degrees or Diplomas granted by the Queen's University in Ireland.

The Examination for the MATRICULATION *of Students in the several Faculties and Departments of Faculty, will commence at Ten o'clock, on Tuesday, the 20th of October*, 1868.

Candidates for Matriculation are required to forward their names to the Registrar of the College, and to state the Faculty or Department of Faculty for which

they propose to matriculate, at least *three days* before the commencement of Matriculation Examinations. *Appendix A.*

Each Candidate, before being admitted to the Matriculation Examination, is required to pay the Bursar of the College the *College Fees* for the year, amounting to 10*s.* for each Faculty or Department of Faculty. These fees will be returned to such Candidates as may fail in passing the Matriculation Examination. General Regulations of College, &c.

After passing the Matriculation Examination, and before receiving a Certificate thereof, or joining the several Classes, each Student is required to pay the Bursar of the College the whole of the *Class Fees* for the Session.

The Lectures in Arts and Engineering commence October 26th, and those in Medicine, November 2nd.

One moiety of the *Class Fees* for the Session is returned to Junior Scholars; but this exemption is not to extend to the Fees of any Honor Lectures attended by them out of the order of studies laid down in the Curriculum.

In order to encourage the study of French by Candidates for Matriculation, a prize of £5 will be offered for competition in that language, to such Students as, at the opening of Session 1868–69, shall have passed the Matriculation Examination for the first time.

Matriculated Students are required to wear an academic dress.

In May and June are held General Examinations in the subjects lectured upon during the Session; and a sum of One Hundred Pounds is awarded in Prizes to the most distinguished Students.

Students who have pursued part of their studies in any one of the Queen's Colleges, or in any University capable of granting Degrees in the several Faculties of Arts, Law, and Medicine, are permitted, on passing the prescribed Examinations, to take corresponding rank in this College, and also to compete for Scholarships of the corresponding year; providing they shall not hold at the same time a Scholarship or other office of emolument in any University or College of a University.

University Prizes.

Two Prizes for English Prose Composition, and two for Geometry, have been founded in each of the Queen's Colleges, to be awarded annually at entrance—First Prize for English Prose Composition, £3 worth of Books; Second ditto, £2 worth of Books. First Prize for Geometry,* £3 worth of Books; Second ditto, £2 worth of Books.

Non-Matriculated Students.

Gentlemen who do not propose, or are not prepared, to matriculate, but who wish to avail themselves, in other respects, of the advantages offered by the College, are permitted to attend the Professors' Lectures, without passing any of the Examinations, on paying to the Bursar the regulated Class Fees, amounting generally to £2 for each course, and College Fee of 5*s.* for the Session; but they cannot become Candidates for Scholarships or Prizes, or enjoy the other privileges of Matriculated Students. They are, however, entitled to the use of the Library, on subscribing the Library Regulations, and paying a fee of 15*s.* for each Session; and the Professors are authorized to recommend to the Council to grant Certificates of Honor to the most distinguished of them in their respective Classes.

East India Civil Service.

The attention of parents and guardians is directed to the new arrangements for the East India Civil Service; according to which Writerships are open to competition at Examinations prescribed by the Board of Control. The course of Lectures in the Queen's College, Cork, are well adapted to prepare Candidates for this Examination, which includes the following branches of knowledge, their relative importance being indicated by the annexed scale of marks.

* 1st, 2nd, 3rd, 4th, and 6th Books of Euclid, with Deductions, together with the Definitions of the 5th Book.

Appendix A.

General Regulations of College, &c.

English Language and Literature:

Composition,		500
English Literature and History, including that of the Laws and Constitution,		1,000
		1,500
Language, Literature, and History of Greece,		750
,, ,, ,, Rome,		750
,, ,, ,, France,		375
,, ,, ,, Germany,		375
,, ,, ,, Italy,		375
Mathematics, pure and mixed,		1,250
Natural Sciences—that is, Chemistry, Electricity, and Magnetism, Natural History, Geology, and Mineralogy,		500
*** No candidate will be allowed to be examined in more than three of the branches of knowledge included under this head, and the total (500) may be obtained by adequate proficiency in any three.		
Moral Science—that is, Logic, Mental and Moral Philosophy,		500
Sanscrit Language and Literature,		375
Arabic Language and Literature,		375
		7,125

Library and Museum.

The Library and Museum are open, under certain regulations, to all the Students.

Faculty of Arts.

Lectures.

The Lectures of the several Professors in this Faculty will commence on Monday, the 26th of October, 1868, except those on the "English Language" and on "Logic," which will not be delivered until the commencement of the Second Term.

Scholarships.

The Examinations for Scholarships will commence on Thursday, the 22nd of October.* The College Council are empowered to confer, at these Examinations, Eight Senior Scholarships of the value of £40 each, and Forty-six Junior Scholarships, viz.:—Fifteen in Literature, and Fifteen in Science, of the value of £24 each; Eight in Medicine, value £25 each; Three in Law, and Five in Civil Engineering, of the value of £20 each—and if competent Candidates present themselves, these Scholarships will be awarded to the most deserving. The Scholarships are tenable for one year only, except the Second Year's Scholarships in Arts, which are tenable for two years, on condition that the Scholar shall pass with Honors the "First University Examination," and shall attend, during the third Session, at least two of the Courses of Lectures prescribed by the University for attendance during that Session, as a qualification for the Degree of B.A., and shall pass the Sessional Examinations in these subjects; but the Scholars of each year are, at its expiration, eligible to become Candidates for the Scholarships of the succeeding year. A Scholarship, however, of the same year in the same Faculty, cannot be held twice by the same Student.

The Scholarships of the first year are open to all Students of the respective Faculties who have passed the Matriculation Examination. Those of the second

* See Programme of Scholarship Examinations, page 16.

and fourth years in Arts, and those of second, third, and fourth years in Medicine and Law, and of the second and third in Engineering, are open to all Students who have passed the Examinations, and attended the Lectures prescribed in the preceding part of their Course of Study.

If any Student be placed, at the Examination for Junior Literary and Science Scholarships, first on both the lists of Candidates, he will be entitled to a Scholarship of each Division; but in no other case will the same Student be permitted to hold two Scholarships.

No Student is entitled to become a Candidate for a Scholarship, or Prize, until he shall have paid the COLLEGE AND CLASS *Fees for the current Session. To be paid on or before the day previous to the Examination.*

The Scholarship endowment is paid by Quarterly Instalments, and its tenure is dependent on the Scholar's performance (so far as required by the Council) of the duties prescribed by the Statutes. These duties are, to take charge of the Class-Rolls, to Register the attendance of the Students, to assist the Professors, &c.

If the Scholar be not obedient to the orders of the Council, be removed from the College, or, by non-attendance on Lectures, fail to keep the terms required for promotion, he forfeits his Scholarship.

The Scholar in the Faculty of Medicine must attend, during the year of his appointment, the classes recommended for his year of study in the order of the following Curriculum:—

FIRST YEAR.	THIRD YEAR.
Anatomy and Physiology.	Surgery.
Chemistry.	Midwifery.
French or German.	Practical Anatomy.
Natural Philosophy.	
Zoology and Botany.	
SECOND YEAR.	**FOURTH YEAR.**
Anatomy and Physiology.	Practice of Medicine.
Materia Medica.	Medical Jurisprudence.
Practical Anatomy.	
Practical Chemistry.	

JUNIOR SCHOLARSHIPS.

Subjects of Examination for Literary Scholarships of the First Year.

The Greek Language:

Homer—The Iliad, Books I., II., III., IV., V., and VI.
Euripides*—The Medea.
Herodotus—The Second Book.
Xenophon—The Anabasis, Books I., II., III.
Lucian—Walker's Selections.
Greek Prose—Re-translation of short sentences from English into Greek.

The Latin Language:

Virgil—First Six Books of the Æneid, the Georgics.
Horace—First Two Books of the Odes, the Satires, and the Epistles, Books I., II.
Cicero—De Senectute, De Amicitiâ.
Sallust—Conspiracy of Catiline, and Jugurthine War.
Cæsar—The Gallic War, Books V., VI.
Latin Prose—Re-translation from English into Latin, of portions of Cicero.
N.B.—The Examination in Greek and Latin will be conducted partly *vivâ voce*, and partly by printed questions.

The English Language:

Original Essays on subjects proposed by the Examiner. The Principles of English Grammar. The Laws of Etymology and Orthography. Craik's Outlines of the History of the English Language.

History and Geography:

Grecian History to the Death of Alexander the Great.
Roman History to the Accession of Augustus.
Outlines of Ancient and Modern Geography.

* For Sessions 1869-70, the *Phœnissæ* of Euripides will be substituted for the *Medea*.

Appendix A.

General Regulations of College, &c.

Subjects of Examination for Literary Scholarships of the Second and Third Years.

The Greek Language:

Homer—Iliad, Books VII. to X. inclusive.
Demosthenes—Olynthiac Orations.
Æschylus.
Euripides—Orestes.
Plato—Crito.
An unprepared passage in prose or verse. Composition in prose and verse.

The Latin Language:

Virgil—Eclogues and Æneid.
Horace.
Terence—Heauton Timorumenos.
Cicero—Tusculan Disputations.
,, De Oratore.
Juvenal—Satires, I., III., VIII., X., XIII., XIV.
Livy—Book IV.
Tacitus—Histories, Book I.

Composition in prose and verse.

The English Language:

Craik's Outlines of the History of the English Language.
History of English Literature. Text-book, Chambers' Cyclopædia of English Literature, Vol. I., pp. 85–145.
Shakespeare's Julius Cæsar.
,, King John.

The French Language:

Molière—L'Avare; Le Misanthrope.
Lafontaine—Fables.
Histoire de la Littérature Française, par Demogeot.
Translation from English into French.

Subjects of Examination for Science Scholarships of the First Year.

Arithmetic:
Mensuration of rectilineal figures and of the circle.

Algebra:
The Solution of Simple and Quadratic Equations with one or more unknown quantities. Easy questions in the application of Algebra to Geometry. Arithmetical and Geometrical Progressions. The nature of Logarithms.

Euclid:
Books I., II., III., and IV., with deductions.

Trigonometry:
Definitions of the Sine, Tangent, &c., of an angle. The easier analytical formulæ. The Solution of Plane Triangles, with demonstrations. Nature and Use of the Tables.

Subjects of Examination for Science Scholarships of the Second and Third Years.

The Higher Arithmetic, with Mensuration:

Algebra:
The Solution of Equations with one or more unknown quantities. Elimination. Theory and use of Logarithms. Theory of Equations. Binomial and Exponential Theorems. Compound Interest and Annuities.

Geometry:
Euclid, Books I., II., III., IV., VI., with deductions. Analytical Geometry.

Trigonometry:
The Solution of Plane Triangles, with demonstrations of the formulæ. Theorems relating to single arcs. Theorems relating to the sums and differences of arcs. Application to heights and distances.

Subjects of Examination for Engineering Scholarships of the First Year.

Arithmetic:
Mensuration:
Algebra:
Euclid:
Trigonometry:
} As for Science Scholarships of the First Year.

Subjects of Examination for Engineering Scholarships of the Second Year.

Mathematics:

The same as for Science Scholarships of the Second Year, except that Spherical Trigonometry will be substituted for Analytical Geometry.

French:

Demogeot—Histoire de la Littérature Française.
Translation from English into French.

Chemistry:

Laws of Combination and Affinity—Preparation and Properties of the Chief Organic Substances—Metallurgic Operations—Mortars and Cements.

Geometrical Drawing:

Descriptive Geometry—Orthographic Projection—Isometric Projection—Perspective—Geometry of Oblique Bridge.

Subjects of Examination for Engineering Scholarship of the Third Year.

Mathematics:

Algebra—Theory of Equations and Methods of Approximation. Elimination. Summation of Series. Binomial and Exponential Theorems. Scales of Notation, &c.

Trigonometry—Plane and Spherical, with Astronomical applications.

Analytical Geometry, and Geometrical Conic Sections.

Differential Calculus—involving demonstrations of the rules for differentiating Algebraic, Circular, and Exponential Functions, founded upon a clear statement of the nature of Limits and Definition of a Differential coefficient. Taylor's and Maclaurin's Theorems. Maxima and Minima. Criteria of the same, with proofs, Equation of Tangent, Normal, Evolute, &c.

Integral Calculus, including more particularly Rational Fractions, Binomial Differentials, Areas of Curves, Rectification of Curves, Cubature of Solids of Revolution.

Natural Philosophy:

Newth's Mechanics.
Ganôt—Traite de Physique—Books VI., VII., VIII., IX.

Geology and Mineralogy.

Civil Engineering:

Instruments used by the Civil Engineer. Their Adjustments and use. Surveying. Levelling.

Senior Scholarships.

Seven Senior Scholarships are appropriated to the Faculty of Arts, for proficiency in Special Departments of Study, and will be conferred, by examination, on the most deserving of the Graduates of the Queen's University, in the Faculty of Arts, of less than two years' standing.

One in Ancient Languages, Literature, and History of Ancient Greece and Rome.

One to Modern Languages, Literature, and History, viz., English Language, Literature, and Composition; European and English History; the French Language, with German or Italian.

One to Mental and Social Science, viz., Logic, Metaphysics, and Political Economy.

One to Mathematics, viz., Pure Mathematics.

One to Natural Philosophy, viz., Experimental Physics, and Mixed Mathematics.

One to Chemistry, viz., Theoretical and Practical Chemistry.

One to Natural History, viz., Zoology and Botany, Geology, and Physical Geography.

For Senior Scholarship in Law, see page 26.

Appendix A.

General Regulations of College, &c.

SUBJECTS OF EXAMINATION

For the Senior Scholarships in the Greek and Latin Languages, and Ancient History.

The Greek Language:

Plato—Republic, Book X.
Together with the subjects for the B. A. Honor Examination at the University.
Composition in Attic Prose and Iambic Verse.
Greek Literature and History.

The Latin Language:

Virgil.
Horace.
Lucretius, Books I., II.
Ovid—Fasti, Book I.
Persius.
Terence—Andria and Heauton Timorumenos.
Plautus—Capteivei and Pseudolus.
Cicero—De Oratore.
,, Tusculan Disputations.
,, Ad Atticum, Books I., II.
,, Actiones Verrinæ.
Livy—Books IV. and XXII.
Tacitus—The Annals, Books I. to IV., inclusive.

Composition in Prose and Verse.

For Senior Scholarships in Modern Languages and History.

The French Language:

Lavallée—Histoire des Français.
Histoire de la Littérature Française, par Demogeot ou Nisard.

The German Language:

National-Literatur, von A. F. Vilmar.
Schiller's Maria Stuart.
Goethe's Ephigenie.

Translation from English into one of the above Languages.

English:

Language, Literature, and Composition.
History—Hallam's Middle Ages.
Chap. II., Part 1, The Feudal System.
Chap. VIII., Part 1, The Anglo-Saxon Constitution.
Chap. VIII., Part 2, The Anglo-Norman Constitution.
Chap. VIII., Part 3, The English Constitution.

The Italian Language:

Tasso—Gerusalemme Liberata—first five Cantos.
Dante's Inferno—Italian Literature, published by Messrs. Chambers.
Translation from English into French, German, or Italian.

For the Senior Scholarship in Mathematics.

The subjects of previous Examinations (for which see page 14), with the following additions:—

Analytical Geometry of Three Dimensions.
Differential Equations.

For the Senior Scholarship in Natural Philosophy.

Duhamel—Mécanique.
Brinkley—Elements of Astronomy, including the Appendix.
Parkinson's Optics.

For the Senior Scholarship in Mental and Social Science.

The subjects discussed in the Lectures of the Professors, with the following additions:—

Metaphysics and Logic:

Sir William Hamilton's Philosophical Essays and Notes on Reid.
Mill—System of Logic, Book III. to the end of Volume I.

Political Economy:

Principles of Political Economy, by John Stuart Mill.
Taxation and Funding, by M'Culloch—third edition, 1863.

The value attached to the subjects will be in the following proportions, viz.:—

Metaphysics and Logic,	60
Political Economy,	40

For the Senior Scholarship in Chemistry.

Chemical Physics (in Miller's Chemistry).

Inorganic Chemistry:

General principles of Chemical Philosophy. Crystallography. Chemistry of the Metals. Constitution of Salts. Metallurgy.

Organic Chemistry:

Ultimate analysis of Organic Bodies. Empirical and Rational formulæ. Determination of the density of Vapours. Law of Substitution. Homologous Series. Chemical Types. Gerhardt's Views. Preparation and Properties of the Alcohol Series and their Derivatives. Cyanogen, its Compounds and Derivatives. Organic Bases of Artificial Origin.

Practical Chemistry:

The Analysis of Mixtures, containing two or more Acids and Bases.

For the Senior Scholarship in Natural Science.

The Lectures of the Professors.
Huxley—Elements of Comparative Anatomy.
Mill's Logic, Book IV.
Lyell's Elements and Principles.

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1. Course for the Degree of Bachelor in Arts.*

Candidates for the Degree of Bachelor of Arts are required—

1. To have been admitted Matriculated Students of the Queen's University in the Faculty of Arts.
2. To have subsequently studied in one of the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examinations herein prescribed.

The Course for the Degree of Bachelor in Arts shall extend over three Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

English (One Term).
Greek.
Latin.
A Modern Continental Language.
Mathematics (First Course).

SECOND SESSION.

Logic (One Term).
Natural Philosophy.

Along with any two of the following:—

Greek (Second Course).
Latin (Second Course).
Modern Continental Languages (Second Course).
Mathematics (Second Course).

THIRD SESSION.

English Language and Literature.
Metaphysics, or History, or Political Economy (Two Terms).
Chemistry.
Zoology, or Botany.

Attendance on these Courses shall, in all cases, be understood to include passing such examinations as may be appointed by the College Council, and the catechetical parts of the Courses of Lectures.

Candidates for the Degree of Bachelor of Arts shall reside at their respective Colleges during at least the first two terms of each Session, but may be exempted from residence during the third term by a special grace of the College Council.

Third year's Students may substitute attendance on one or on two Courses of Honor Lectures, for a like number of the Courses above set down for study in the third Session.

* His Royal Highness the Commander-in-Chief has approved of Graduates of the Queen's University being in future exempted from the usual Examination for direct Commissions; and also of the First University Examination being accepted in lieu of that for the Royal Military College, Sandhurst.

Appendix A. — General Regulations of College, &c.

Candidates for the Degree of Bachelor in Arts shall pass two University Examinations—a Preliminary and a Degree Examination.

The Course for the Preliminary Examination shall include Greek, Latin, a Modern Continental Language, and Mathematical Science. Students who have completed their second Session must pass this Examination before rising to the third year, unless prevented by illness or other inevitable accident, in which case the Senate may admit them to a Supplementary Examination.

Candidates who have completed the Undergraduate Course, may offer themselves at the Degree Examination for graduation either with Honors or without Honors.

If they seek to graduate with Honors, they may select for their Examination any one of the following groups:—

Greek and Latin.
Modern Continental Languages.
Mathematical Science.
Experimental Science.
Natural Science.

Or any three of the following:—

English Language and Literature.
Metaphysics.
History.
Political Economy.
Logic.

Candidates who seek the Degree without Honors, may select for their Examination any group of the subjects from the following lists, provided the sum of the numbers attached in this list to the selected subjects be at least four:—

English Language and Literature,	2	Latin,	1
Mathematical Science,	2	Each Modern Continental Language,	1
Experimental Physics,	2	Logic,	1
Chemistry,	2	Metaphysics,	1
Zoology,	1	History,	1
Botany,	1	Political Economy,	1
Greek,	1		

English Composition will form a part of all University Examinations.

2. Course for the Degree of Master in Arts.

Bachelors in Arts of one year's standing, may offer themselves for Examination for the Degree of Master in Arts, and may select for their Examination any one of the following groups:—

Greek and Latin.
Modern Continental Languages.
Mathematical Science.
Experimental Science.
Natural Science.

Or any three of the following:—

English Language and Literature.
Metaphysics.
History.
Political Economy.
Logic.

This Ordinance supersedes former Ordinances prescribing the curriculum for the Degree of Master in Arts.

3. Course for the Diploma of Licentiate in Arts.

A Diploma conferring the title of Licentiate in Arts of the Queen's University in Ireland, shall be granted to Candidates who comply with the following regulations:—

Candidates for this Diploma are required—

1. To have Matriculated in the Queen's University.
2. To have pursued in one of the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examination herein prescribed.

The Course for the Diploma of Licentiate in Arts shall extend over two Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

Two Languages, of which one may be English.
Mathematics.
Another Course on any subject in the annexed list.

SECOND SESSION.

Greek, Latin, or a Modern Continental Language.
Logic (One Term).
Natural Philosophy.
And two other Courses on subjects in the annexed list.

If any of the Courses, except that on Logic, extend over one Term only, some other Course from the annexed list must be attended as a supplement to it, but not necessarily in the same Session.

Credit will not be given for attending the same Course of Lectures a second time.

Attendance on the Courses shall, in all cases, be understood to include passing such Examinations as the College Council shall appoint, and the catechetical parts of the Courses of Lectures.

Candidates for the Diploma of Licentiate in Arts shall reside at their respective Colleges during at least the first two terms of each Session.

After having completed the above curriculum, Candidates for the Diploma shall pass a University Examination in Greek, Latin, or a Modern Continental Language; in Mathematical Science; and in two other subjects selected from the annexed list, viz.:—

The Mathematical Sciences.
The Experimental Sciences.
The Natural Sciences.
Geometrical Drawing.
Mensuration, Levelling, and Mapping.
Anatomy and Physiology.
English Language and Literature
The Modern Continental Languages.
Greek.
Latin.
Logic.
Metaphysics.
History.
Political Economy.

English Composition will form a part of all University Examinations.

Licentiates in Arts who may desire to proceed to the Degree of Bachelor in Arts, may enter directly on the second Session in the Course for this Degree, provided they attend in it, instead of the usual curriculum, all the Courses prescribed for the first two years which they shall not have already attended in the curriculum for the Diploma of Licentiate.*

University Prizes.

University Exhibitions in the Faculty of Arts.

Three Exhibitions of £20 a year for three years, three Exhibitions of £15 a year for three years, and two Exhibitions of £10 a year for three years, will be competed for annually in the Faculty of Arts. The three £20 Exhibitions will be awarded to the Candidates who stand foremost in order of merit from each College, at the first University Examination in Arts; and the three £15 Exhibitions to the Candidates who stand second in order of merit from each College: provided that their names appear in the First Class of the Division List at that Examination. Of the two £10 Exhibitions, one will be awarded to the best answerer in Mathematical Science, and the other to the best answerer

* Note.—Degrees in Arts, conferred by the Queen's University in Ireland, are recognised by the University of Durham, by St. Bee's College, Whitehaven, and by St. Aidan's College, Birkenhead, in the case of Theological Students preparing for Holy Orders in the Established Church.

Appendix A.

General Regulations of College, &c.

in the Ancient Classics, at the first University Examination. The £10 Exhibitions are open to the competition of Candidates from all the Colleges, and may be held along with one of the larger Exhibitions.

Each Candidate will be deemed a Student of that College in which he shall have attended the Lectures of the second Session; and no Student will be admitted to the competition who shall have allowed more than one academic year to intervene between the time that he entered upon the studies of the second Session and the time of competition.

The first instalment of each Exhibition will be paid at the time of competition; the second when the Exhibitioner takes the Degree of B.A. in the Queen's University, provided he graduate with honors, and within two academic years; and the third when he takes the Degree of M.A. in the Queen's University, provided he obtain it within three academic years from the time of competition.

University Prizes in Composition, open to the Competition of Graduates and Undergraduates.

Two Prizes for English Prose Composition, one of £10 worth of Books, and the other of £5 worth of Books, have been founded, and are open to the competition of all members of the University who shall not have been graduates for more than three years at the time of competition, and who shall not have already twice obtained one or other of these Prizes.

University Prizes in Composition, open to the Competition of all Undergraduates.

Two Prizes in Composition, one for English Prose, the other for Greek or Latin Prose, and each consisting of £5 worth of Books, have been founded, and are open to the competition of all undergraduates, provided that neither the English nor the Classical Prize be awarded oftener than twice to any Student.

Diploma in Engineering.

Each Candidate for the Diploma in Civil Engineering is required—

1. To have been admitted a Matriculated Student of the Queen's University in the Department of Civil Engineering.
2. To have studied in the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examinations herein prescribed.

The Course for the Diploma in Civil Engineering shall usually extend over Three Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

Mathematics (First Course).
Chemistry.
Modern Languages.
Geometrical Drawing.
Office Work.
Mineralogy, Geology, and Physical Geography.

SECOND SESSION.

Mathematics (Second Course).
Experimental Physics.
Civil Engineering.
Office Work.
Field Work.

THIRD SESSION.

Natural Philosophy, applied.
Mathematical Physics.
Civil and Mechanical Engineering.
Office Work.
Field Work.
Engineering Excursions.

Attendance on these Courses shall in all cases be understood to include passing such Examinations as may be appointed by the College Council, as well as the catechetical parts of the Courses of the Lecture.

Engineering Students shall reside at their respective Colleges during at least the first two Terms of each Session, and can be exempted from residence during the third Term also, only by a special grace of the College Council.

The study of the Engineering Curriculum may be extended over more than three Sessions, on the recommendation of the College Council, and under such regulations as the Council shall impose. Some relaxation of the order in which the subjects shall be studied will also be admitted, on the recommendation of the Council.

Candidates will, on the special recommendation of the College Council, be admitted to the Diploma after two years' residence instead of three, if their previous acquaintance with a sufficient group of the subjects above set down for study in the First and Second Session is deemed by the Council satisfactory. In such cases the Certificate of the Council will be accepted in lieu of attendances upon these Courses, but will not exempt Candidates from the University Examinations in them.

In order to obtain this Certificate, Students must have attended previously at least one Session in Arts, or one year in an Engineer's office. On making application to the Council, such Students will be allowed to present themselves, at the time of Matriculation, for examination in the subjects of any four of the eight Courses of Lectures of the first two years. On passing this Examination, they will be allowed to take rank at once as Students of the second year, and will then be required to attend those other four Courses of Lectures only, in the subjects of which they have not passed; but they will not be eligible for the Scholarship of that year.

The application to be admitted to this Examination must be lodged with the Registrar before the first day of the Session, and must state what are the four subjects in which the Students propose to offer themselves for Examination, and must be accompanied by a Certificate of the required attendance of one or more years in Arts or an Engineer's Office.

On passing the Sessional Examinations in the subjects of these four Courses of Lectures which they shall have attended as Students of the second year, they will be promoted to the rank of Students of the third year; and, on completing the regular Course of that year, will be furnished with the Certificate required by the Senate of the University.

The University Examinations shall extend to all the subjects of the above Curriculum. French will, in all cases, be required.

Candidates must present themselves before the close of their Collegiate Course for Examination in the following subjects, viz.:—Mathematics (*First Course*); Experimental Physics; Modern Languages; Geometrical Drawing (including Orthographic projection, Isometric projection, Descriptive Geometry, and Linear Perspective); Mathematics (*Second Course*); Mensuration, Levelling, and Mapping.

The final Examination shall extend to all the subjects of the Engineering Course, in which the Candidate shall not have previously passed. English Composition will form a part of each University Examination.

This Ordinance shall take effect from the first day of January, 1860; Students who shall have entered the Engineering Schools of the Colleges of Queen's University previously, may proceed either under the present Ordinance, or under that hitherto in force.

Exhibitions in the School of Engineering.

Two Exhibitions, one of £20 a year for two years, and the other of £15 a year for two years, will be competed for annually in the School of Engineering. These Exhibitions will be awarded at the first University Examination in Engineering: the £20 Exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated, and the £15 Exhibition to the Candidate who is first in order of merit of the competitors from the other two Colleges: provided that their names appear in the First Class of the Division List at that Examination.

Each Candidate will be deemed a Student of that College in which he shall have attended the Lectures of the second Session; and no Student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

Appendix A.

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The first instalment of each Exhibition will be paid at the time of competition; the other when the Exhibitioner take the Diploma in Engineering of the Queen's University, provided that he takes honors with it, and obtain it within two academic years from the time of competition.

Faculty of Medicine.

Lectures, &c.

The Medical Session will be opened on Monday, 2nd of November, 1868, and the Courses of Lectures will commence as under:—

Anatomy and Physiology—Monday, 2nd November, at One o'clock, to be continued daily, except on Saturdays, at the same hour.

Practice of Medicine—Monday, 2nd November, at Three o'clock, to be continued on Mondays, Wednesdays, and Fridays, at the same hour.

Practice of Surgery—Tuesday, 3rd November, at Four o'clock, to be continued on Tuesdays and Thursdays, at Four o'clock, and Saturdays, at One o'clock.

Materia Medica—Tuesday, 3rd November, at Three o'clock, to be continued on Tuesdays and Thursdays, at Three o'clock; and on Saturdays, at Twelve o'clock.

Medical Jurisprudence—Monday, 2nd November, at Twelve o'clock, to be continued on Tuesdays and Thursdays, at the same hour, and on Fridays at One o'clock.

Midwifery—Monday, 2nd November, at Four o'clock, to be continued on Mondays, Wednesdays, and Fridays, at the same hour.

The Course of Practical Anatomy will be conducted by the Professor of Anatomy and Physiology, assisted by Dr. Shinkwin and Dr. H. M. Jones, Demonstrators.

The Anatomical Demonstrations will commence on 2nd of November, and be continued daily at Twelve o'clock, except Saturdays.

Chemistry—Monday, Wednesday, and Friday, at Two o'clock.

Practical Chemistry—Monday, Tuesday, Wednesday, Thursday, and Friday.

Zoology and Botany—Monday, Wednesday, and Friday.

Natural Philosophy—Tuesdays and Thursdays.

Modern Languages—Monday, Wednesday, and Friday.

Subjects of Examination for Medical Scholarships of the First Year.

The Scholarships of the First year in the Faculty of Medicine will be awarded thus:—One to the Candidate who shall have most distinguished himself at the Examination in the course prescribed for Science Scholarships of the First year in Arts, and one to the Candidate who shall have most distinguished himself at the Examination in the course prescribed for Literary Scholarships of the First year in Arts. Candidates for these Scholarships shall have previously declared themselves, and have Matriculated as Medical Students. It is left to their option for which of them they will compete.

Subjects of Examination for Medical Scholarships of the Second Year.

Anatomy and Physiology.	General Physics.
Chemistry.	Zoology and Botany.

The French Language.

Subjects of Examination for Medical Scholarships of the Third Year.

Anatomy and Physiology.	Materia Medica.
Practical Anatomy.	Practical Chemistry.

Subjects of Examination for Medical Scholarships of the Fourth Year.

Anatomy and Physiology.	Pathology and Morbid Anatomy.
Practical Anatomy.	Surgery.
Therapeutics.	Midwifery.

Note.—The 17th of November will be the last day for entering for the Six Months' Courses of Lectures in the above Curriculum. All the Lectures are recognised by the Queen's University in Ireland, by the Universities of London, Glasgow, Aberdeen, and St. Andrew's; the Colleges of Surgeons of Dublin, Edinburgh, and London; by the Apothecaries' Companies, by the Army, Navy, and East India Medical Boards, &c., &c.

Degrees of M.D. and M.Ch.*

General Regulations of College, &c.

Each Candidate for the Degree of Doctor in Medicine or Master in Surgery is required—

1st.—To have passed in one of the Colleges of the Queen's University the Entrance Examination in Arts, and to have been admitted a Matriculated Student of the University.

2nd.—To have attended in one of the Queen's Colleges, Lectures on one Modern Continental Language for six months, and Lectures on Natural Philosophy for six months.

3rd.—To have also attended, in some one of the Queen's Colleges, at least two of the courses of Lectures marked with an asterisk. For the remainder of the courses, authenticated certificates will be received from the Professors or Lecturers in Universities, Colleges, or Schools, recognised by the Senate of the Queen's University in Ireland.

4th.—To pass two University Examinations—the First University Examination, and the Degree Examination.

The Curriculum shall extend over at least four years, and shall be divided into periods of at least two years each.

Candidates are recommended to pass the Matriculation Examination, prior to entering on the second period.

It is recommended that the first period shall comprise attendance on the following Courses of Medical Lectures:—

* Chemistry.
* Botany, with Herborizations for practical study, and Zoology.
* Anatomy and Physiology.
* Practical Anatomy.
* Materia Medica and Pharmacy.

And that the second period shall comprise attendance on the following Course of Medical Lectures:—

Anatomy and Physiology (Second Course).
Practical Anatomy (Second Course).
* Theory and Practice of Surgery.
* Midwifery.
* Theory and Practice of Medicine.
* Medical Jurisprudence.

In addition to the above Courses of Lectures, Candidates shall have attended during either the first or second period—

A Modern Continental Language (in one of the Colleges of the University).
Experimental Physics (in one of the Colleges of the University).

Also, during the first period—

Practical Chemistry (in a recognised Laboratory).
Medico-Chirurgical Hospital (recognised by the Senate) containing at least sixty beds, together with the Clinical Lectures therein delivered, at least Two each Week—a Winter Session of Six Months.

And during the second period—

Practical Midwifery, at a recognised Midwifery Hospital, with the Clinical Lectures therein delivered—for a period of Three Months, in an Hospital containing not less than Thirty beds; or six Months, in an Hospital containing not less than Fifteen beds.

Medico-Chirurgical Hospital (recognised by the Senate) containing at least sixty beds, together with the Clinical Lectures therein delivered—*Eighteen* Months; including either three Winter Sessions of Six Months each, or two Winter Sessions of Six Months each, and two Summer Sessions of Three Months each.

Medical Examinations are held in June, and in September and October.

The June Examinations are Pass Examinations, and commence on the Tuesday following the Second Saturday in June.

* The regulations under which degrees in Surgery will be conferred on Candidates who graduated in Medicine before the year 1865, may be learned on application to the Secretary of the Queen's University.

Appendix A. General Regulations of College, &c.

The Honor Examinations commence on the last Tuesday in September, and are followed by Pass Examinations.

Each Candidate for Examination in June must forward to the Secretary, on or before the first of June, notice of his intention to offer himself as a Candidate, along with his Certificates; and each Candidate for Examination in September or October must forward similar notice, along with his certificates.

Exhibitions in the Faculty of Medicine.

Two exhibitions, one consisting of two instalments of £20 each, and the other of two instalments of £15 each, will be competed for annually in the Faculty of Medicine. These exhibitions will be awarded for proficiency in the non-professional part of the first University Examination in Medicine: the £20 exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated; and the £15 exhibition to the candidate who is first in order of merit of the competitors from the other two colleges; provided that their names appear in the First Class of the Division List at that examination.

Each Candidate will be deemed a student of that College in which he shall have attended the Lectures of the second session; and no student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

The exhibitions in Medicine will be paid in two equal instalments: one at the time of competition; the other when the exhibitioner takes the Degree of M.D. in the Queen's University, provided that he graduate with honors, and within three academic years from the time of competition.

Prize in Composition, limited to the Competition of Undergraduates in Medicine.

A prize of £5 worth of books has been founded, for a thesis on a subject to be prescribed, and is limited to the competition of the Undergraduates in Medicine who shall not have already twice received the prize.

The subjects on which the competitors for composition prizes are to write, will be announced on or before the first of June in each year; the compositions, with fictitious signatures, are to be sent in to the Secretary of the University, on or before the first of the following September, and the successful competitors will be declared at the next Public Meeting of the University.

Hospital Attendance.—Clinical Lectures on Medicine and Surgery are delivered at the North and South Infirmaries, by the Physicians and Surgeons of those Institutions.

	£	s.	d.
Fee for twelve months,	8	8	0
Fee for six months,	5	5	0
Practical Pharmacy at the same Infirmaries:			
Fee for three months,	3	3	0
Clinical Midwifery at the Lying-in Hospital, with Practical Attendance upon Thirty Midwifery cases:			
Fee for six months,	3	3	0

Further information may be had from the Medical Officers at the Infirmaries.

Faculty of Law.

Lectures.

The complete Course for each Class consists of Twenty-four Lectures, by the Professor of English Law, in each Collegiate Session; and of Twenty-four Lectures in each course of the first two years. The Lectures are delivered in the months of December, February, and March.*

* The following Rules were adopted by the Honorable Society of King's Inns, in Hilary Term, 1862, with reference to attendance on Lectures, as a condition precedent to being called to the Bar, viz.:—

V.—Every Student admitted into the Society after the first day of Trinity Term, One Thousand Eight Hundred and Fifty, if a Graduate of the University of

Law Scholarships.

Examination by the Professor of Jurisprudence.

First Year:

Reddie's Inquiries in the Science of Law.
Adam Smith's Wealth of Nations—Book III.
Hallam's Middle Ages—Chap. 8.

Examination by the Professor of English Law.

First Year:

Williams—Principles of the Law of Real Property.

Second Year:—By Professor of Jurisprudence.

The Lectures of the Professor in the First Year (see note).
Sandar's Institutes of Justinian—Introduction.
The Chapters on Social Science in J. S. Mill's Logic—Book VI., Chap. 6, to end of the Book.

By Professor of English Law.

The Lectures of the Professor for the preceding years.
Smith—Manual of Equity Jurisprudence.
Williams—Principles of the Law of Personal Property.
Smith—On Contracts.

Third Year:—By Professor of Jurisprudence.

Ancient Law, by H. S. Maine (omitting latter part of chap. 9, from p. 340).
Sandar's Justinian, and the Lectures of the Professor, in the first and second year.

Note.—The following works may be referred to in connexion with the principal subjects discussed in the Lectures on Jurisprudence:—

Dumont's Bentham (translation by Hildreth), "Principles of Legislation," and 1st and 2nd parts of the "Principles of the Civil Code."
Stephens' "Criminal Law."
Mill's "Political Economy"—Chapters on Property, 1 and 2, Book II., and on the Function of Government, 8, 9, 10, 11, Book V.
Mill's "Representative Government."

By Professor of English Law.

The Lectures of the Professor for the preceding years.
Smith—Leading cases on branches of the Law.
Storey—Equity Jurisprudence.

Dublin, Oxford, Cambridge, Durham, or London, or the Queen's University in Ireland, shall, as a condition precedent to being called to the Bar, produce Certificates of his having attended two complete Courses *at least* of Lectures, viz.:—one complete Course of Lectures of any two, at his option, of the four Law Professors—namely, the Law Professors of the University of Dublin, and those of the King's Inns, and *at least* five-sixths of the Lectures of each Session or University Term; or if a Graduate in Arts of the Queen's University in Ireland, shall have the option of producing Certificates of having attended two complete Courses, at least, of Lectures of each of the two Law Professors of any College of the Queen's University, comprising not less than thirty-six Lectures, and at least five-sixths of the Lectures of each Course, and of having passed the Examinations, in the College to which he belongs, on the subjects of the aforesaid two Courses of Lectures, provided that the curriculum prescribed by the said two Courses of Lectures shall embrace all that is contained in the Course now prescribed by the Professors of the King's Inns, or as the same may be from time to time varied by any rules of the Benchers.

VI.—Every Student admitted into the Society after the above date (if not a Graduate of one of the said Universities), shall, as a condition precedent to being called to the Bar, produce Certificates of his having attended four Courses of Lectures, viz.:—One Course of the Lectures of each of the said four Professors, and, *at least*, five-sixths of the Lectures of each Session, or University Term, in such manner, however, that every such Student shall be engaged not less than three years in the study of the Law in Ireland, exclusive of the two years necessary for keeping Terms in England; in every one of which three years, one complete Course of Lectures must be kept; any Student who shall produce Certificates of his having attended during three years the Courses of Lectures delivered by the Professors of English Law and of Jurisprudence, in one of the Colleges of the Queen's University, and of his having passed the General Examinations in such College on the subjects so Lectured on, shall be deemed entitled to such and the same privileges, in respect to his being called to the Bar, as if he had actually attended One Course of the

Appendix A. General Regulations of College, &c.

The Senior Law Scholarship will be awarded, by Examination, to the most distinguished Student who shall have proceeded in the Course of Arts to the Degree of A.B., and who shall have completed the Course of Legal Study prescribed to Candidates for the Degree of LL.B. in the Queen's University in Ireland.

Examination for the Senior Scholarship in Law.

The Lectures of the Professors and subjects appointed for Scholarship Examination in the preceding years.
Sugden—The Law of Vendors and Purchasers.
Furlong—Law of Landlord and Tenant.
Taylor—Treatise on the Law of Evidence.
Stephen—Treatise on the Principles of Pleading.
Hallam—Constitutional History.
May's Constitutional Law.

Degrees in Law.

Candidates for the Diploma of Elementary Law must have passed a Matriculation Examination* (see page 10), and pursued the following

Course of Study for the Diploma of Elementary Law.

First Session—Law of Property and Principles of Conveyancing—Jurisprudence.
The Course of the Professor of English Law for the Class of the First Year, "The Law of Real Property," comprises Elementary Instruction in this branch of Law, and in practical Conveyancing. The text-book read is Williams on "Real Property." The first volume of Stephens' edition of Blackstone's Commentaries, and the second volume of Kerr's edition, are recommended for perusal.

Second Session—Equity and Bankruptcy—Civil Law.
The Course of the Professor of English Law for the Class of the Second Year, "The Law of Personal Property," Equity, and "Bankruptcy," comprise instructions in those branches of law, and in the practical application of Precedents, &c. The text-books read are Williams on "Personal Property," "Smith's Manual of Equity," "The late Statute of Bankruptcy and Insolvency," by Adams. The second volume of Stephens' and Kerr's editions of Blackstone's Commentaries, and Smith's "Mercantile Law," are recommended for perusal.

Third Session—Common and Criminal Law.
The Course of the Professor of English Law for the Class of the Third Year, "Common and Criminal Law," comprises the History, Constitution, and Jurisdiction of the several Courts of Justice; Procedure in Crown and Civil Causes at Law and in Equity, as also in the Local Courts. The text-books are the third and fourth volumes of Blackstone's Commentaries, Stephens' and Kerr's editions, "Broom's Common Law," "Broom's Maxims," "Smith's Leading Cases," and "Copinger's County Courts," are recommended for perusal.

Students intending to proceed for the certificate of the Law Professors, so as to entitle themselves to serve an apprenticeship of four years instead of five, under the Act for amending the several Acts for the regulation of Attorneys and Solicitors (14 and 15 Vict., chap. 88), must enter their names with the Registrar of one of the Queen's Colleges of Cork, Belfast, and Galway, and pay the necessary College and Class Fees to the Bursar before the commencement of the Law Lectures in each Session.

Such Students need not pass the Matriculation Examination, but must attend the Lectures, and pass the College Examinations prescribed for the first and

Lectures of each of the two Law Professors of the University of Dublin, and had been engaged for two years in such attendance; but this rule and the preceding one are not intended to affect the number of Terms' Commons required by the present Rules of the Society, to be kept by Students of the King's Inns, prior to being called to the Bar.

VII.—If from illness, or other sufficient cause, any Student should be prevented from completing any Course of Lectures necessary towards being called to the Bar, the Legal Education Committee have power to direct what further attendance, if any, shall be sufficient in such case.—*Rules as to Legal Education, No.* 3.

* Note.—It will be sufficient for such Candidate to have passed his Examination at *any* time previous to applying for the Diploma. By the Act of Parliament, 14 and 15 Vic., cap. 88, it is provided, that every person who, as a Matriculated or

second years, of the course of study for Candidates for the Diploma in Elementary Law. *Appendix A.*

Candidates for the Degree of LL.B. will be admitted to Examination for that Degree from the Queen's University in Ireland, provided they shall have proceeded to the Degree of A.B., and shall have attended the Lectures and passed the Examinations prescribed for the Diploma of Elementary Law. General Regulations of College, &c.

Students who have obtained the Degree of LL.B. will, at the expiration of two years after they have obtained the Degree, be admitted to the Examination for the Degree of LL.D. They are examined in the Laws of the Admiralty and Ecclesiastical Courts of England and Ireland, and in International Law.

Books suggested:

Lord Hale's Treatise, De Jure Maris.
Dr. FitzHenry Townsend's statement of the differences in Jurisdiction and Practice between the English and Irish Courts of Admiralty, annexed to the Report of the Royal Commission of Inquiry, 1864.
Rogers' Ecclesiastical Law.
Wheaton's International Law.
'Historicus,' Letters of, on International Law.

TABLE OF CLASS FEES.

ARTS CURRICULUM.

FIRST SESSION.

	£	s.	d.
English (One Term),	1	0	0
Greek,	2	0	0
Latin,	2	0	0
A Modern Continental Language,	2	0	0
Mathematics (First Course),	2	0	0
College Fee,	0	10	0

SECOND SESSION.

Logic (One Term),	1	0	0
Natural Philosophy,	2	0	0
Greek (Second Course),	2	0	0
Latin (Second Course),	2	0	0
Modern Continental Languages (Second Course),	1	0	0
Mathematics (Second Course),	2	0	0
College Fee,	0	5	0

THIRD SESSION.

English Language and Literature,	2	0	0
Metaphysics, or History, or Political Economy (Two Terms), each,	2	0	0
Chemistry,	2	0	0
Zoology or Botany,	2	0	0
College Fee,	0	5	0

ENGINEERING CURRICULUM.

FIRST SESSION.

	£.	s.	d.
Mathematics (First Course),	2	0	0
Chemistry,	2	0	0
Modern Languages.	2	0	0
Geometrical Drawing,	2	0	0
Office Work,	2	0	0
Mineralogy, Geology, and Physical Geography,	2	0	0
College Fee,	0	10	0

SECOND SESSION.

Mathematics (Second Course),	2	0	0
Experimental Physics,	2	0	0
Civil Engineering,	2	0	0
*Office Work,	2	0	0
College Fee,	0	5	0

THIRD SESSION.

Natural Philosophy, applied,	2	0	0
Mathematical Physics,	2	0	0
Civil and Mechanical Engineering,	2	0	0
*Office Work,	2	0	0
College Fee.,	0	5	0

Non-Matriculated Student, shall have attended the prescribed Lectures, and passed the prescribed Examinations of the Professors of the Faculty of Law for two Collegiate years, and who shall have duly served as an apprentice or clerk by contract in writing, duly stamped at or before the signing thereof, or within six months after, for the term of four years, shall, at any time after the expiration of five years from the commencement of such attendance on Lectures or of such a period of service, whichever shall first happen, be qualified to be admitted as an Attorney or Solicitor as fully and effectually as any person having been bound, and having served five years is now qualified to be admitted. See also the same Act for the privileges extended to Graduates of the Queen's University, respecting admission to the profession of Attorney or Solicitor.

* For students who have attended this course in the first year the fee is only £1.

Appendix A.

General Regulations of College, &c.

TABLE OF HOURS OF LECTURE.

Name of the Class.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Senior Greek,	9	9	10	–	9	–
Junior Greek,	10	–	9	9	10	–
Extra Greek,	–	10	–	10	–	–
Senior Latin,	10	–	9	–	10	–
Junior Latin,	9	10	10	10	–	–
Extra Latin,	–	11	–	11	–	–
English Language,	–	11	–	11	–	10
English Literature,	–	12	–	12	–	11
History,	1	–	1	–	1	–
Medical French,	12	–	12	–	12	–
Senior French (*Arts and Engineering*),	1	–	1	–	1	–
Junior French (*Arts and Engineering*),	2	–	2	–	2	–
German or Italian,	–	2	–	2	–	2
Celtic Languages,	12	–	12	–	12	–
Logic,	–	12	–	12	–	9
Metaphysics,	–	1	–	1	–	10
Political Economy and Jurisprudence,	–	11	11	11	11	–
Senior Mathematics,	2	–	2	–	2	–
Junior Mathematics,	12	–	12	–	12	–
Third Year's Mathematics,	3	–	3	–	3	–
Mathematical Physics,	–	–	12	–	12	–
Mathematical Physics (*Engineering*),	1	–	–	1	–	–
Experimental Physics, Senior,	11	–	11	–	11	–
Experimental Physics, Junior,	–	11	–	11	–	–
Engineering Physics,	–	1	–	–	1	–
Physics (Honor),	12	–	–	12	–	–
Chemistry,	11	–	11	–	11	–
Practical Chemistry,	2	–	2	–	2	–
Zoology and Botany,	3	–	3	–	3	–
Geology and Mineralogy,	–	2	–	2	–	10
Senior Engineering,	12	–	12	–	12	–
Junior Engineering,	–	10	–	10	–	10
Geometrical Drawing,	10	–	10	–	10	–
Office Work (10 till 2),	–	10	–	10	–	10
Anatomy and Physiology,	1	1	1	1	1	–
Practical Anatomy,	12	12	12	12	12	–
Medicine,	3	–	3	–	3	–
Surgery,	–	4	–	4	–	1
Materia Medica,	–	3	–	3	–	12
Midwifery,	4	–	4	–	4	–
Medical Jurisprudence,	–	12	–	12	1	–
English Law (1st year),	–	11	11	11	11	–
English Law (2nd year),	–	3	3	3	3	–
English Law (3rd year),	–	9	9	9	9	–
English Law (4th year),	–	12	12	12	12	–
Jurisprudence,	–	1	1	1	1	–
Civil Law,	–	4	4	4	4	–
Constitutional and International Law,	–	10	10	10	10	–

The Fees payable by Students, whether Matriculated or Non-matriculated, to the several Professors, for attendance on the several Pass Courses of Lectures or instruction, which are now or may be hereafter prescribed by the College Council, for any Degree or other University distinction, shall be £1 for each Course extending over one Term only, and £2 for each Course extending over more than one Term of a Session, when attended for the first time, and £1 for each re-attendance on the same; except that the Fee payable for the Course of Anatomy and Physiology shall be £3 when attended for the first time, and £2 for every subsequent attendance; except also, that the Fee payable for Practical Anatomy or Practical Chemistry, shall be £3 for each attendance.

In the case of Students receiving special instructions, not prescribed as a qualification for a Degree or other University distinction, or attending Honor Courses of Lectures, the Council shall have power to fix the amount of the Fee

to be paid by each Student; provided that the Fee to be paid for any Honor Course of Lectures which Students are entitled to substitute for a prescribed Pass Course, shall in no case be less than £2.

PROGRAMME OF THE TIMES AND SUBJECTS OF THE SCHOLARSHIP EXAMINATIONS FOR THE SESSION 1868–69.

Examination Days.	From 9 to 12 o'clock.	From 2 to 5 o'clock.
Thursday, October 22nd,	Greek. Geometrical Drawing.	Greek.
Friday, October 23rd, .	Latin.	Mathematics.
Saturday, October 24th,	Modern Languages.	Pathology. Latin.
Monday, October 26th,	Materia Medica. Therapeutics. English Language (1st year).	Zoology and Botany. Practical Anatomy. History and English Lit. (senior).
Tuesday, October 27th,	English Literature (2nd and 3rd year).	Anatomy and Physiology.
Wednesday, Oct. 28th,	Surveying, &c. Surgery.	Practical Chemistry.
Thursday, October 29th,	Political Economy.	Midwifery.
Friday, October 30th, .	Logic. Metaphysics,	Chemistry.
Saturday, October 31st,	Natural Philosophy.	Geology and Mineralogy.
Thursday, Dec. 3rd., . .	English Law.	Civil Law.

APPENDIX.

Outlines of the Courses of Lectures delivered by the Professors of the Faculty of Arts.

LITERARY DIVISION OF THE FACULTY OF ARTS.

In Greek and Latin the classification of the Students is irrespective of their Collegiate standing; those of the First and Second years being distributed between two classes according to their proficiency. There is also in each of these Departments an Extra Class, the attendance on which is voluntary, and which consists generally of those Students who propose to become Candidates for Degree of A.M. or Classical Honors in the Queen's University, or for appointments in the Indian Civil Service.

Both the Extra and Ordinary Classes are open to Non-Matriculated Students, *i.e.* to gentlemen who have not yet commenced their Undergraduate course, or who do not intend to take *Degrees in Arts*.

THE GREEK LANGUAGE.

Professor, JOHN RYALL, LL.D.

Junior Class, Monday, Wednesday, Thursday, and Friday—Xenophon, Anab. Book VII.
Second Year, Monday, Wednesday, Thursday, and Friday—Sophocles, Œdipus Rex.
Third Year, Tuesday, Thursday—Æschylus, Eumenides.
Exercises in Prose and Verse, according to the proficiency of the Students.

Appendix A.

General Regulations of College, &c.

The Latin Language.

Professor, Bunnell Lewis, M.A., F.S.A.

Senior Class, Monday, Wednesday, and Friday:
Virgil—Eclogues.
Cicero—De Natura Deorum.
Junior Class, Monday, Tuesday, Wednesday, and Thursday:
Livy—Part of Book XXIII.
Horace—Satires, Book II., beginning at Satire 5.
Exercises in both Classes chiefly from Arnold's Introduction to Latin Composition.
Extra and Third Year's Class, Tuesday and Thursday:
Histories—Tacitus, Book III.
Terence—Heauton Timorumenos.

In this Class special attention is paid to original Composition, and to translation from English Authors into Latin.

History, English Literature, and the English Language.

Professor, William Rushton, M.A.

1st and 2nd Term. { History—Monday, Wednesday, and Friday.
English Literature—Tuesday, Thursday, and Saturday.
2nd Term—The English Language—Tuesday, Thursday, Saturday.

History:

1. European History from the decline of the Roman Empire to the present time.
2. History of Britain and Ireland.

English Literature:

The Course will include the History of English Literature, along with a Critical Examination of its Standard Works from the earliest period up to the present day.

The English Language:

1. The History of the English Language.
First Year.—Text Book, Craik's Outlines.
Third Year.—Text Books, Max Muller on the Science of Language.
Marsh's Lectures.
2. Grammar and Composition.
Text Books, Latham—English Language.
Adams—Elements of the English Language.
Angus—Handbook of the English Tongue.
Campbell's Philosophy of Rhetoric.
Whately's Rhetoric.

English Composition.
Essays on subjects discussed in the Lectures. Translations. Analysis. Original Essays.

Modern Languages.

Professor, R. De Vericour, M.A.

French Class (Medical), Mondays, Wednesdays, and Fridays, at 12 o'clock.
Senior French (Arts and Engineering), Mondays, Wednesdays, and Fridays, at 1 o'clock.
Junior French Class (Arts and Engineering), Mondays, Wednesdays, and Fridays, at 2 o'clock.
German or Italian, Tuesdays and Fridays, at 2 o'clock.
Medical French—Lectures sur les Sciences, par Achille Comte. Extracts from Bichat, Andral, Lallemand, and Chomel. Weekly Lectures on the Grammar and Idioms.
Senior and Junior French—Corneille's Cid and Cinna. Fables de Lafontaine. Racine's Athalie, and Esther. Histoire de la Revolution Française, par Mignet. Le Misanthrope and L'Avare of Molière. Histoire de la Littérature Française; par Demogeot. Lectures sur les Sciences, par Achille Comte. Weekly Lectures on the Grammar and Idioms.
Italian—Silvio Pelico. Tasso. Extracts from Machiavelli, Guicciardini, Davila, Manzoni. Weekly Lectures.
German—Göethe's Ballads and Iphigenie. Schiller's Wilhelm Tell. National Literature, von A. F. Villmar. Weekly Lectures.

SPECIAL COURSE NOT REQUIRED FOR A DEGREE.—CELTIC LANGUAGES.

Professor, OWEN CONNELLAN, Esq.

Monday, Wednesday, and Friday.

Subject—I. The Celtic Family of Languages; and its existing derivations, the Erse or Gaelic, Manx, Welch, Armorican, and Hiberno-Celtic. The Ogham Alphabet. The Ancient Literature of Ireland, viz.:—The earlier Bardic Compositions, the Ossianic Poems and Fenian Legends; View of the Contemporaneous state of Ireland.*

,, II. The Irish Language as now extant, its Grammar, Vocabulary, and Dialects. In this part of the course, the Student will be taught to speak and write the language grammatically.

Fee for each Sessional Course, £2.

* The Lectures will be illustrated by reference to Irish MSS., and such publications on Irish Historical and general Literature as are at present accessible.

SCIENCE DIVISION OF THE FACULTY OF ARTS

MATHEMTICS.

Professor, CHARLES NIVEN, B.A.

Junior Class, Monday, Wednesday, and Friday.
Subjects—Arithmetic, Algebra, Geometry, and Plane Trigonometry.

Second Year's Class, Monday, Wednesday, and Friday.
Subjects—Analytical Geometry, Trigonometry, Differential and Integral Calculus.

Third Year's Class:
Subjects—Geometry of three dimensions, Differential Equations, &c.
Exercises are regularly set in each of the Classes.

LOGIC AND METAPHYSICS.

Professor, GEORGE SIDNEY READ, M.A.

2nd Term, . Logic, . Tuesday, Thursday, and Saturday.
1st & 2nd Terms, Metaphysics, Do. do. do.

Logic.—This Course consists of:—

I.—Lectures, Examinations, and Exercises in Aldrich's Compendium of Logic, occupying the early part of the Term, &c.

II.—A full discussion of Classification, the Theory of Hypothetical Syllogisms and of Induction, and the Analytic of Logical Forms, as contained in the works of Mill, Whately, Thompson, and Baynes.

Throughout the Course the Students will be expected to familiarize themselves with the reduction of arguments to their strict Logical Form by written exercises, which will be examined by the Professor.

Metaphysics.—This Course will embrace:—

I.—The Philosophy of the Inductive Sciences, illustrated by reference to Lord Bacon, Whewell, and Mill; and—

II.—The History of Mental Philosophy, comprising—

1st.—The origin, progress, and development of Modern Philosophy anterior to the rise of the Scottish School.

2nd.—A critical examination of the works of the more celebrated writers of that School.

3rd.—A brief view of the present state of Philosophy in the British Islands and on the Continent.

POLITICAL ECONOMY.

Professor, RICHARD HORNER MILLS, M.A.

Political Economy.—The nature and distribution of wealth, the principles which regulate Rents, Profits, and Wages; the Principles of Commerce, of Taxation, of the Funding System, and of Currency and Banking.

Books recommended:—

Adam Smith—Wealth of Nations.
Senior—Political Economy.
Fawcett's Manual of Political Economy.
John Stuart Mill—Political Economy.

Appendix A.

General Regulations of College, &c.

Richard H. Mills—Lectures on Currency and Banking (Second Edition).
M'Culloch—Taxation and Funding (Third Edition).
Goschen on Foreign Exchanges.

The Course consists of Twenty-four Lectures, delivered in the months of December, February, and March; the Students are required in the intervals to prepare the subjects which will be pointed out by the Professor.

Chemistry.

Professor, John Blyth, M.D.

Monday, Wednesday, and Friday.

The Course is divided into Inorganic and Organic Chemistry.

In the first part are discussed the Laws of Combination and Affinity, Molecular Chemistry and Crystallography, and the History of the Non-Metallic and Metallic substances.

In the Organic portion of the Course will be considered the subjects of Organic Analysis, Organic Series, Compound Radicals and Types, Metamorphosis of Organic Bodies, History of special Animal and Vegetable Bodies.

In treating of the Laws of Chemistry, and the History of Inorganic and Organic Bodies, those points will be chiefly dwelt upon which have a practical bearing in the Arts, Medicine, Engineering, and Agriculture. Thence, during the Course, attention will be directed to the application of Chemistry to Medicine and Physiology, to Metallurgic Operations, Chemical Manufactures, Building Materials, Soils, Manures.

Fee, for each Sessional Course, £2. Each subsequent Course in Medicine, £1.

Analytical Chemistry:

The Chemical Laboratory is open daily, except on Saturdays, from 10 to 4 o'clock, under the superintendence of the Professor, for students desirous of prosecuting an extended course of qualitative and quantitative analysis, and for the purpose of original investigation in connexion with the arts, or in the higher departments of Scientific Chemistry.

Natural Philosophy.

Professor, John England, M.A.

Experimental Physics (Senior):

Text Books—Galbraith and Haughton's Manuals of Mechanics, Hydrostatics, &c.; Jamin; Traite de Physique.

Experimental Physics (Junior):

Text Books—Ganot, Traité de Physique.

Mathematical Physics:

Text Books—Duhamel's *Mecanique*. Parkinson's *Optics*. Brinkley's *Astronomy*.

Engineering Physics:

Text Books—Tate's *Exercises in Mechanics*, selections from the works of Mosely, De Pambour, Weisbach, Twisden's Practical Mechanics, &c.

Natural History.

Professor, Joseph Reay Greene, B.A. M.D.

Monday, Wednesday, and Friday.

The Lectures delivered by the Professor of Natural History are as follow:—

A Course of Lectures on General Zoology.
A Course of Lectures on Botany.

Students may obtain Certificates of Attendance on all or any of these Courses.

Text Books recommended:

In Botany—"Elementary Course of Botany," by Henfrey.
In Zoology—"Zoologie" (in Cours Elémentaire d'Histoire Naturelle), par Milne Edwards; or the English translation of the same work by Dr. Knox.

Such Students as desire during the Summer months to pursue the study of Botany in the field, are requested to provide themselves with Lindley's "Descriptive Botany," and Bentham's "Handbook of the British Flora."

Geology and Mineralogy.

Professor, Robert Harkness, F.R.S.S.L. & E., F.G.S.

Monday, Wednesday, and Friday.

General Structure of the Earth; the causes at present in operation which modify its surface; Nature of Rocks which enter into composition with the crust of the Globe; description and classification of Sedimentary Deposits; Organic Remains; Physical Geography of the Earth during the several geological epochs; characters and nature of Igneous, Plutonic, and Metamorphic Rocks; Mineral Veins—their contents and mode of occurrence; application of Geology to Engineering, Mining, Agriculture and Land Improvement.

Forms, Structure, Physical and Chemical characters of Minerals; descriptions of the most important simple minerals—circumstances and conditions under which they are found.

Civil Engineering.

Professor, Alexander Jack, M.A.

First Year.—Monday, Wednesday, and Friday.

Subject of Lectures—Orthographic Projection; Descriptive Geometry; Shadows; Isometric Projection; Perspective; Geometry of the Oblique Bridge; Principles of Architecture.

Text Books—Hall's Descriptive Geometry; Engineer and Machinist's Drawing Book; Rickman's Architecture; Buck on Oblique Bridges.

Second Year.—Tuesday, Thursday, and Saturday.

Subject of Lectures—Surveying and Levelling.

Text Books—Rankine's Civil Engineering; Cotton's Manual of Railway Engineering; Williams' Geodesy.

Third Year.—Monday, Wednesday, and Friday.

Materials used in Construction; Principles of Construction of Bridges, Roads, Railways, Canals; Hydraulic Engineering; Strength of Materials; Principles of the Construction of the different Machines employed by the Engineer.

Drawing Office—Attended by all the Classes—Tuesday, Thursday, and Saturday.

The First Year's Class are chiefly employed in drawing the problems given at lectures, and a few easy examples of their applications. The Second and Third Years' Classes, in making working drawings of examples of the subjects of lectures, and in Mapping.

Practical Instruction in the Field in the use of Surveying Instruments will be given during the Session.

Special Prospectus of Courses of Instruction given in the Colleges which are applicable to the Examination for the Indian Civil Service.

Special Prospectus of Courses for Competitive Examinations.

Subjects of Examination for the Indian Civil Service.	*Lectures on these Subjects in Queen's College, Cork.*
1. English Language and Literature:	History and English Language—*Professor*, William Rushton, M.A.
a. Composition, Marks, 500	*First Term.*—Modern History: Monday, Wednesday, and Friday.
b. English Literature and History, including that of the Laws and Constitution, Marks, 1,000	*Second Term.*—English Literature: Tuesday, Thursday, and Saturday. History of the English Language: Tuesday, Thursday, Saturday.
1,500	English Composition will, at the stated periods, be required from the students.

Appendix A.

Special Prospectus of Courses for Competitive Examinations.

2. LANGUAGE, LITERATURE, and HISTORY of GREECE:
Marks, 750

GREEK—*Professor*, John Ryall, LL.D.
Senior Class: Monday, Friday, Wednesday.
Junior Class: Monday, Friday, Wednesday, Thursday.
Extra Class: Tuesday, Thursday.

3. LANGUAGE, LITERATURE, and HISTORY of ROME:
Marks, 750

LATIN—*Professor*, Bunnell Lewis, M.A. F.S.A.
Senior Class: Monday, Wednesday, Friday.
Junior Class: Monday, Tuesday, Wednesday, Thursday.
Extra Class: Tuesday and Thursday.

The Extra Class, both in Latin and Greek, the attendance on which is voluntary, consists generally of those students who propose to become Candidates for the Degree of M.A., or Classical Honors, in the Queen's University, or for appointments in the Indian Civil Service.

4. LANGUAGE, LITERATURE, and HISTORY of FRANCE:
Marks, 375

FRENCH—*Professor*, R. De Vericour, M.A.
Senior Class: Monday, Wednesday, Friday.
Junior Class: Monday, Wednesday, Friday.

5. LANGUAGE, LITERATURE, and HISTORY of GERMANY:
Marks, 375

GERMAN.
Tuesday, Thursday.

6. LANGUAGE, LITERATURE, and HISTORY of ITALY:
Marks, 375

ITALIAN.
Monday, Wednesday, and Friday.

7. MATHEMATICS, Pure and Mixed:
Marks, 1,250

MATHEMATICS—*Professor*, Charles Niven, B.A.
Junior Class: Monday, Wednesday, Friday.
Senior Class: Monday, Wednesday, Friday.

MATHEMATICAL PHYSICS—*Professor*, John England, M.A.
Tuesday, Thursday, and Saturday.

8. NATURAL SCIENCES: that is, Chemistry, Electricity, and Magnetism, Natural History, Geology, and Mineralogy:
Marks, 500

*** No Candidate will be allowed to be examined in more than three of the branches of knowledge included under this head, and the total (500 marks) may be obtained by adequate proficiency in any three.

CHEMISTRY—*Professor* Blyth, M.D.
Monday, Wednesday, and Friday.

EXPERIMENTAL PHYSICS (Electricity and Magnetism)—*Professor*, John England, M.A.
Monday, Wednesday, and Friday.

NATURAL HISTORY—*Professor*, J. R. Greene, B.A., M.D.
Monday, Wednesday, and Friday.

GEOLOGY and MINERALOGY—*Professor*, Robert Harkness, F.R.SS.L. & E., F.G.S.
Monday, Wednesday, and Friday.

9. Moral Sciences: that is, Logic, Mental and Moral Philosophy: Marks, 500	Logic and Metaphysics—*Professor*, G. S. Read, M.A. Logic: Tuesday, Thursday, Saturday. Metaphysics: Tuesday, Thursday, Saturday. Jurisprudence and Political Economy—*Professor*, Richard Horner Mills, M.A.	*Appendix A* — Special Prospectus of Courses for Competitive Examinations.

Courses of Instruction given in the College which are applicable to the Competitive Examination for Admission to the Royal Military Academy at Woolwich.

Subjects of Examination for the direct appointments to the Practical Class at Woolwich.	*Lectures on these Subjects in Queen's College, Cork.*
Mathematics (Pure): Marks, 2,500	*Professor*, Charles Niven, B.A. Junior Class: Monday, Wednesday, Friday. Senior Class: Monday, Wednesday, Friday.
Mathematics (Mixed):— Statics, Dynamics, Hydrostatics: Marks, 1,000	*Professor*, John England, M.A. Tuesday, Thursday, and Saturday.
Language of Ancient Rome: Marks, 1,500	*Professor*, Bunnell Lewis, M.A., F.S.A. Junior Class: Monday, Tuesday, Wednesday, Thursday.
Language of Ancient Greece: Marks, 1,500	*Professor*, John Ryall, LL.D. Junior Class: Monday and Friday, Wednesday and Thursday.
Language of France: Marks, 1,000	*Professor*, Raymond de Vericour, M.A. Monday, Wednesday, and Friday.
And Germany: Marks, 1,000	
English Language, Literature, Composition, History and Geography (Modern): Marks, 3,000	*Professor*, William Rushton, M.A. Tuesday, Thursday, and Saturday.
Experimental Sciences:— Chemistry: Marks, 1,000	*Professor*, John Blyth, M.D. Monday, Wednesday, and Friday.
Heat, Electricity, including Magnetism: Marks, 1,000	*Professor*, John England, M.A. Monday, Wednesday, and Friday.
Natural Sciences:— Mineralogy and Geology: Marks, 1,000	*Professor*, Robt. Harkness, F.R.SS.L. & E., F.G.S.
Drawing, *i.e.*, Elementary Geometrical Drawing, including the use of Drawing Instruments: Marks, 500	*Professor*, Alexander Jack, M.A. Monday, Wednesday, and Friday.
Machinery, Architectural, Topographical, Landscape, or Figure Drawing: Marks, 500	Monday, Wednesday, and Friday.

Appendix A.
Special Prospectus of Courses for Competitive Examinations

Competitive Examinations for admission are held in London twice a year, in January and July. They are conducted by Examiners appointed for the purpose, in the presence and under the superintendence of the Council of Military Education.

The Candidates must be between 16 and 19 years of age.

The admissions will be determined by the result of the examination, the subjects of which will be as follows, viz.:—

			Marks.
1. Mathematics,	Pure,	Section I. Arithmetic, Algebra, Euclid, Plane Trigonometry, . 2,000	3,500
		Section II. Spherical Trigonometry, elements of Co-ordinate Geometry, and of the Differential and Integral Calculus,* . 500	
	Mixed:—Statics, Dynamics, and Hydrostatics, ... 1,000		

* *Syllabus of Examination in the Differential and Integral Calculus.*

DIFFERENTIAL CALCULUS.

The meaning of Differentiation.
The Differentiation of Elementary Functions of one independent variable.
The theorems of Taylor and Maclaurin, with their applications.
The theory of Maxima and Minima, with its applications.
The equations to the Tangents, Normals, and Asymptotes of Plane Curves.
The curvature of Plane Curves and their radii of curvature and evolutes.
The Differential Coefficients of the Arcs and Areas of Plane Curves to rectangular and polar Co-ordinates, and of the surfaces and volumes of solids of revolution.

INTEGRAL CALCULUS.

The meaning of Integration.
The Integration of Elementary Functions.
The Integration of Rational Fractions.
The determination of the lengths and areas of Plane Curves, and of the surfaces and volumes of solids of revolution.

	Marks.
2. English Language and Composition, ...	1,000
3. History of England, its Dependencies and Colonies, . .	1,000
4. Geography (Modern), ...	1,000
5. Classics, {Latin Language, ...	1,500
{Greek ditto, ...	1,500
6. French Language, ...	1,000
7. German ditto, ...	1,000
8. Hindustani ditto, ...	1,000

The examination in French, German, and Hindustani, will include writing from dictation.

		Marks.
9. Experimental Sciences, *i.e.*, Chemistry, Heat, Electricity, including Magnetism, ...		1,000
10. Natural Sciences, *i.e.*, Mineralogy and Geology, . .		1,000
11. Drawing,	Elementary Geometrical Drawing, including the use of Drawing Instruments, . . .	500
	Free-hand Drawing of Machinery, Architectural, Topographical, Landscape, or Figure Subjects, .	500

No Candidate will be allowed to be examined in more than five subjects, of which one must be Mathematics; and no one who does not obtain at least 700 marks in Section I. of Pure Mathematics will be eligible for an appointment.

Residences.

There is no accommodation for the residence of students within the College, but it is provided by the Statutes that every Matriculated Student, being under the age of Twenty-one Years, shall reside, during the College Terms, with his parent or guardian, or with some relation or friend, to whose care he shall have been committed by his parent or guardian, or in one of the Boarding-houses licensed by the President of the College and arranged for the reception of students, who are then placed under the moral care and spiritual charge of the Deans of Residence of their respective creeds.

The Terms for Board and Lodging are generally at the rate of from £30 to £40 a-year.

DEANS of RESIDENCES. *Appendix A.*

Church of England,	. . .	Rev. George Webster, D.D.
Presbyterian Church,	. . .	Rev. William Magill.
Wesleyan Communion,	. . .	Rev. Edward Best.
Non-Subscribing Presbyterian,	. .	Rev. W. Whitelegge, M.A.

Deans of Residences.

N.B.—Letters from persons desiring further information, to be addressed to the Registrar.

Signed,

By order of the President,

ROBERT JOHN KENNY, *Registrar.*

APPENDIX B.

Appendix B.

Examination Papers for Scholarships.

SELECTION OF PAPERS OF QUESTIONS USED AT THE SCHOLARSHIP EXAMINATIONS.

GREEK.—FIRST YEAR SCHOLARSHIPS.

Translate:—

HERODOTUS, Book ii., c. 91.

Ἑλληνικοῖσι δὲ νομαίοισι φεύγουσι χρᾶσθαι, τὸ δὲ σύμπαν εἰπεῖν, μηδ' ἄλλων μηδαμὰ μηδαμῶν ἀνθρώπων νομαίοισι. οἱ μέν νυν ἄλλοι Αἰγύπτιοι οὕτω τοῦτο φυλάσσουσι, ἔστι δὲ Χέμμις πόλις μεγάλη νομοῦ τοῦ Θηβαϊκοῦ ἐγγὺς Νέης πόλιος. ἐν ταύτῃ τῇ πόλι ἐστὶ Περσέος τοῦ Δανάης ἱρὸν τετράγωνον, πέριξ δὲ αὐτοῦ φοίνικες πεφύκασι. τὰ δὲ πρόπυλα τοῦ ἱροῦ λίθινά ἐστι, κάρτα μεγάλα· ἐπὶ δὲ αὐτοῖσι ἀνδριάντες δύο ἑστᾶσι λίθινοι μεγάλοι. ἐν δὲ τῷ περιβεβλημένῳ τούτῳ νηός τε ἔνι καὶ ἄγαλμα ἐν αὐτῷ ἐνέστηκε τοῦ Περσέος. οὗτοι οἱ Χεμμῖται λέγουσι τὸν Περσέα πολλάκις μὲν ἀνὰ τὴν γῆν φαίνεσθαί σφι, πολλάκις δὲ ἔσω τοῦ ἱροῦ, σανδάλιόν τε αὐτοῦ πεφορημένον εὑρίσκεσθαι, ἐὸν τὸ μέγαθος δίπηχυ, τὸ ἐπεὰν φανῇ, εὐθηνέειν ἅπασαν Αἴγυπτον. ταῦτα μὲν λέγουσι, ποιεῦσι δὲ τάδε Ἑλληνικὰ τῷ Περσέϊ· ἀγῶνα γυμνικὸν τιθεῖσι διὰ πάσης ἀγωνίης ἔχοντα, παρέχοντες ἄεθλα κτήνεα καὶ χλαίνας καὶ δέρματα. εἰρομένου δέ μευ, ὅ τι σφι μούνοισι ἔωθε ὁ Περσεὺς ἐπιφαίνεσθαι καὶ ὅ τι κεχωρίδαται Αἰγυπτίων τῶν ἄλλων ἀγῶνα γυμνικὸν τιθέντες, ἔφασαν τὸν Περσέα ἐκ τῆς ἐωυτῶν πόλιος γεγονέναι· τὸν γὰρ Δαναὸν καὶ τὸν Λυγκέα ἑόντας Χεμμίτας ἐκπλῶσαι ἐς τὴν Ἑλλάδα ἀπὸ δὲ τούτων γενεηλογέοντες κατέβαινον ἐς τὸν Περσέα. ἀπικόμενον δὲ αὐτὸν ἐς Αἴγυπτον κατ' αἰτίην, τὴν καὶ Ἕλληνες λέγουσι σίσοντα ἐκ Λιβύης τὴν Γοργοῦς κεφαλήν, ἔφασαν ἐλθεῖν καὶ παρὰ σφέας καὶ ἀναγνῶναι τοὺς συγγενέας πάντας· ἐκμεμαθηκότα δέ μιν ἀπικέσθαι ἐς Αἴγυπτον τὸ τῆς Χέμμιος οὔνομα, πεπυσμένον παρὰ τῆς μητρός· ἀγῶνα δέ οἱ γυμνικὸν αὐτοῦ κελεύσαντος ἐπιτελέειν.

Write down in the Attic dialect that portion of the extract beginning τὰ δὲ πρόπυλα τοῦ ἱροῦ κ.τ.λ., and ending ποιεῦσι δὲ τάδε Ἑλληνικὰ τῷ Περσέϊ.

Translate into Greek:—

1. I know that I am mortal. I know that he is mortal.
2. The upper city. The intervening space. The present king.
3. While you were playing, I was writing.
4. When the allies were approaching, the Athenians had conquered the Persians.
5. If you were to say this, you would err. If you say this, you will err.
6. You must desire virtue. You must attempt the work. You must punish the man.
7. Cyrus, leaping down from his chariot, put on his breastplate, and, mounting his horse, took his javelins in his hands.

Appendix B.

Examination Papers for Scholarships.

Translate:—

(A).—Homer—*Iliad*, Book v., vv. 554–575.

οἵω τώ γε λέοντε δύω ὄρεος κορυφῇσιν
ἐτραφέτην ὑπὸ μητρὶ βαθείης τάρφεσιν ὕλης·
τὼ μὲν ἄρ' ἁρπάζοντε βόας καὶ ἴφια μῆλα
σταθμοὺς ἀνθρώπων κεραΐζετον, ὄφρα καὶ αὐτὼ
ἀνδρῶν ἐν παλάμῃσι κατέκταθεν ὀξέϊ χαλκῷ·
τοίω τ' χείρεσσιν ὑπ' Αἰνείαο δαμέντε
καππεσέτην, ἐλάτῃσιν ἐοικότες ὑψηλῇσιν.
τὼ δὲ πεσόντ' ἐλέησεν Ἀρηΐφιλος Μενέλαος,
βῆ δὲ διὰ προμάχων κεκορυθμένος αἴθοπι χαλκῷ,
σείων ἐγχείην· τοῦ δ' ὦτρυνεν μένος Ἄρης,
τὰ φρονέων, ἵνα χερσὶν ὑπ' Αἰνείαο δαμείη.
τὸν δ' ἴδεν Ἀντίλοχος, μεγαθύμου Νέστορος υἱὸς,
βῆ δὲ διὰ προμάχων· περὶ γὰρ δίε ποιμένι λαῶν,
μή τι πάθοι, μέγα δέ σφας ἀποσφήλειε πόνοιο.
τὼ μὲν δὴ χεῖράς τε καὶ ἔγχεα ὀξυόεντα
ἀντίον ἀλλήλων ἐχέτην μεμαῶτε μάχεσθαι·
Ἀντίλοχος δὲ μάλ' ἄγχι παρίστατο ποιμένι λαῶν.
Αἰνείας δ' οὐ μεῖνε, θοός περ ἐὼν πολεμιστὴς,
ὡς εἶδεν δύο φῶτε παρ' ἀλλήλοισι μένοντε.
οἱ δ' ἐπεὶ οὖν νεκροὺς ἔρυσαν μετὰ λαὸν Ἀχαιῶν,
τὼ μὲν ἄρα δειλὼ βαλέτην ἐν χερσὶν ἑταίρων,
αὐτὼ δὲ στρεφθέντε μετὰ πρώτοισι μαχέσθην.

1. (*a*). State the mood, tense, number, and person of each of the following verbs, giving also their Attic equivalents:—ἐτραφέτην, κεραΐζετον, ἐλέησε, δαμείη, ἴδεν, βῆ, δίε, ἀποσφήλειε, ἐχέτην, παρίστατο, μεῖνε, εἶδε, ἔρυσαν, βαλέτην, μαχέσθην.—Write down the present infinitive of each. (*b*). Decline, both according to the Homeric and the Attic forms, δύω, χείρεσσιν, Αἰνείαο. (*c*). Explain the grammatical forms, ἐοικότες, κεκορυθμένος, μεμαῶτε. (*d*). What part of speech is περί, v. 566? Distinguish between περί and πέρι. (*e*). Notice any peculiarity in the scansion of v. 563.

Translate:—

(B).—Euripides—*Medea*, vv. 1028–1050.

ὦ δυστάλαινα τῆς ἐμῆς αὐθαδίας.
ἄλλως ἄρ' ὑμᾶς, ὦ τέκν', ἐξεθρεψάμην,
ἄλλως δ' ἐμόχθουν καὶ κατεξάνθην πόνοις,
στερρὰς ἐνεγκοῦσ' ἐν τόκοις ἀλγηδόνας.
ἦ μήν ποθ' ἡ δύστηνος εἶχον ἐλπίδας
πολλὰς ἐν ὑμῖν γηροβοσκήσειν τ' ἐμὲ
καὶ κατθανοῦσαν χερσὶν εὖ περιστελεῖν,
ζηλωτὸν ἀνθρώποισι· νῦν δ' ὤλωλε δὴ
γλυκεῖα φροντὶς. σφῷν γὰρ ἐστερημένη
λυπρὸν διάξω βίοτον ἀλγεινόν τ' ἐμοί.
ὑμεῖς δὲ μητέρ' οὐκέτ' ὄμμασιν φίλοις
ὄψεσθ', ἐς ἄλλο σχῆμ' ἀποστάντες βίου.
φεῦ φεῦ· τί προσδέρκεσθέ μ' ὄμμασιν, τέκνα;
τί προσγελᾶτε τὸν πανύστατον γέλων;
αἰαῖ· τί δράσω; καρδία γὰρ οἴχεται,
γυναῖκες, ὄμμα φαιδρὸν ὡς εἶδον τέκνων.
οὐκ ἂν δυναίμην· χαιρέτω βουλεύματα
τὰ πρόσθεν· ἄξω παῖδας ἐκ γαίας ἐμούς.
τί δεῖ με πατέρα τῶνδε τοῖς τούτων κακοῖς
λυποῦσαν αὐτὴν δὶς τόσα κτᾶσθαι κακά;
οὐ δῆτ' ἔγωγε. χαιρέτω βουλεύματα.
καίτοι τί πάσχω; βούλομαι γέλωτ' ὀφλεῖν
ἐχθροὺς μεθεῖσα τοὺς ἐμοὺς ἀζημίους;

1. (*a*). What is the construction of the gen. *αὐθαδίας*, v. 1028. (*b*). How do you derive the meaning of *ἄλλως* in the text from its primitive meaning? In what other sense is it sometimes used? (*c*). Supply the subject of *γηροβοσκήσειν*, and explain the construction of *ζηλωτόν*, vv. 1033–5. (*d*). Explain the formation and use of verbal adjectives in *τος* and *τεος*. (*e*). What is the construction of *γέλων*, v. 1041? (*f*). Derive or decompound *αὐθαδία*, *κατεξάνθην*, *δύστηνος*, *πανύστατον*. (*g*). Translate *literally* *χαιρέτω βουλεύματα* and *γέλωτα ὀφλεῖν*.—Which accentuation do you approve, *ὀφλεῖν* or *ὄφλειν*, and why?

2. (*a*). Point out the rhythmical faults in the following verses:—

Ἄτλας ὁ χαλκέοισι νώτοις οὐρανόν.
τίνας λόγους ἐροῦσιν, ἐν γὰρ τῷ μαθεῖν.

(*b*). Are the following rhythms admissible?—

πεισόμεθ' ὅταν δὲ μὴ καλῶς οὐ πείσομαι.
ἀλλ' ὡς τάχιστα παῖδες ὑμεῖς μὲν βάθρων.

3. State the distinctions between epic, dramatic, lyric, and didactic poetry; and give the names and eras of the principal Grecian authors in each kind.

Second Year Scholarships.

Translate:—

(A).—Homer—*Odyssey*, Book xiv., vv. 72–92.

ὣς εἰπὼν ζωστῆρι θοῶς συνέεργε χιτῶνα,
βῆ δ' ἴμεν ἐς συφεούς, ὅθι ἔθνεα ἔρχατο χοίρων.
ἔνθεν ἑλὼν δύ' ἔνεικε καὶ ἀμφοτέρους ἱέρευσεν,
ευσέ τε μίστυλλέν τε καὶ ἀμφ' ὀβελοῖσιν ἔπειρεν.
ὀπτήσας δ' ἄρα πάντα φέρων παρέθηκ' Ὀδυσῆϊ
θέρμ' αὐτοῖς ὀβελοῖσιν· ὁ δ' ἄλφιτα λευκὰ πάλυνεν·
ἐν δ' ἄρα κισσυβίῳ κίρνη μελιηδέα οἶνον,
αὐτὸς δ' ἀντίον ἷζεν, ἐποτρύνων δὲ προσηύδα.
"ἔσθιε νῦν, ὦ ξεῖνε, τάτε δμώεσσι πάρεστιν,
χοίρε'· ἀτὰρ σιάλους γε σύας μνηστῆρες ἔδουσιν,
οὐκ ὄπιδα φρονέοντες ἐνὶ φρεσὶν οὐδ' ἐλεητύν.
οὐ μὲν σχέτλια ἔργα θεοὶ μάκαρες φιλέουσιν,
ἀλλὰ δίκην τίουσι καὶ αἴσιμα ἔργ' ἀνθρώπων.
καὶ μὲν δυσμενέες καὶ ἀνάρσιοι, οἵτ' ἐπὶ γαίης
ἀλλοτρίης βῶσιν καί σφι Ζεὺς ληΐδα δώῃ,
πλησάμενοι δέ τε νῆας ἔβαν οἴκόνδε νέεσθαι,
καὶ μὲν τοῖς ὄπιδος κρατερὸν δέος ἐν φρεσὶ πίπτει.
οἵδε δὲ καί τι ἴσασι, θεοῦ δέ τιν' ἔκλυον αὐδήν,
κείνου λυγρὸν ὄλεθρον, ὅτ' οὐκ ἐθέλουσι δικαίως
μνᾶσθαι οὐδὲ νέεσθαι ἐπὶ σφέτερ', ἀλλὰ ἕκηλοι
κτήματα δαρδάπτουσιν ὑπέρβιον, οὐδ' ἔπι φειδώ."

1. (*a*). *ἔρχατο*.—Explain fully the origin of this form, stating the verb from which it comes. Show that it was a digammated word. (*b*). Derive *συφεός*, *κισσύβιον*, *παλύνω*, *ἀνάρσιος*, *ὄπις*. (*c*). Explain the following grammatical forms:—*ἔνεικε*, *κίρνη*, *βῶσιν*, *δώῃ*, *ἔπι*. (*d*). Distinguish between *χοῖρος* and *σίαλος*, *δώῃ* and *δῴη*. (*e*). Is *ὅτ'* (v. 90) for *ὅτι* or *ὅτε*? State the reason for your opinion. (*f*). Supply the final letter of *χοίρε'* (v. 81). What part of speech is the word? Give its Attic form.

2. Point out the *anacoluthon* in the sentence beginning *καὶ μὲν δυσμενέες κ.τ.λ.* and correct its syntax.

Translate:—

(B).—Æschylus—*Prometheus Vinctus*, vv. 887–905.

ΧΟ. *ἦ σοφὸς ἦ σοφὸς ὅς* *στρ.*
πρῶτος ἐν γνώμᾳ τόδ' ἐβάσταασε καὶ γλώσσᾳ διεμυθολόγησεν,
ὡς τὸ κηδεῦσαι καθ' ἑαυτὸν ἀριστεύει μακρῷ.
καὶ μήτε τῶν πλούτῳ διαθρυπτομένων

Appendix B.

Examination Papers for Scholarships.

μήτε τῶν γέννᾳ μεγαλυνομένων
ὄντα χερνήταν ἐρασθεῖσαι γάμων.
μήποτε μήποτέ μ' ὦ ἀντ.
* * * Μοῖραι λεχέων Διὸς εὐνάτειραν ἴδοισθε πέλουσαν· 895
μηδὲ πλαθείην γαμέτᾳ τινὶ τῶν ἐξ οὐράνου.
ταρβῶ γὰρ ἀστεργάνορα παρθενίαν
εἰσορῶσ' Ἰδὼς μέγα δαπτομέναν
δυσπλάνοις Ἥρας ἀλατείαις πόνων. 900
ἐμοὶ δ' ὅτι μὲν ὁμαλὸς ὁ γάμος
ἄφοβος, οὐ δέδια, μηδὲ κρεισσόνων θεῶν
ἔρως ἄφυκτον ὄμμα προσδράκοι με.
ἀπόλεμος ὅδε γ' ὁ πόλεμος, ἄπορα
πόριμος· οὐδ' ἔχω τίς ἂν γενοίμαν. 905

1. (*a*). Give the primitive meanings of *βαστάζειν* and *διαθρύπτειν*, and thence derive those which they bear in the text. (*b*). Give the feminine forms of *χερνήτης* and *γαμέτης*, and the masc. of *εὐνάτειρα*. (*c*). Derive or decompound *χερνήτης*, *ἀστεργάνωρ*, *ὁμαλός*, *δύσπλανος*. (*d*). From what verb does *πλαθείην* come, and what other form of the word is found? (*e*). What grammatical figure is exemplified in the words *ἀλατείαις πόνων*? (*f*). Explain the construction of *ὄμμα*, v. 903, and of *ἄπορα*, v. 904.

2. *ἐμοὶ δ' ὅτι κ.τ.λ.* vv. 902–4. Translate with Hermann's reading:—*ἐμοὶ δὲ γ' ὅτε μὲν ὁμαλὸς ὁ γάμος, ἄφοβος, οὐδὲ δέδια μηδὲ τού με κρεισσόνων θεῶν ἔρως προσδράκοι ὄμμ' ἄφυκτον.*

3. Translate into tetrameter iambic verse:—

Alas! good vent'rous youth,
I love thy courage yet, and bold emprize;
But here thy sword can do thee little stead;
For other arms and other weapons must
Be those that quell the might of hellish charms.

Translate:—

(A).—Herodotus, Book vii., c. 133.

ἐς δὲ Ἀθήνας καὶ Σπάρτην οὐκ ἀπέπεμψε Ξέρξης ἐπὶ γῆς αἴτησιν κήρυκας τῶνδε εἵνεκεν· πρότερον Δαρείου πέμψαντος ἐπ' αὐτὸ τοῦτο οἱ μὲν αὐτῶν τοὺς αἰτέοντας ἐς τὸ βάραθρον, οἱ δ' ἐς φρέαρ ἐσβαλόντες ἐκέλευον γῆν τε καὶ ὕδωρ ἐκ τούτων φέρειν παρὰ βασιλέα. τούτων μὲν εἵνεκεν οὐκ ἔπεμψε Ξέρξης τοὺς αἰτήσοντας. ὅ τι δὲ τοῖσι Ἀθηναίοισι ταῦτα ποιήσασι τοὺς κήρυκας συνήνεικε ἀνεθέλητον γενέσθαι, οὐκ ἔχω εἶπαι, πλὴν ὅτι σφέων ἡ χώρη καὶ ἡ πόλις ἐδηϊώθη. ἀλλὰ τοῦτο οὐ διὰ ταύτην τὴν αἰτίην δοκέω γενέσθαι.

Atticise, in dialect and style, the following passage:—

Ξέρξης δὲ ἐκ τῆς Ἀκάνθου ἐντειλάμενος τοῖσι στρατηγοῖσι τὸν ναυτικὸν στρατὸν ὑπομένειν ἐν Θέρμῃ ἀπῆκε ἀπ' ἑωυτοῦ τὰς νέας πορεύεσθαι, Θέρμῃ δὲ τῇ ἐν τῷ Θερμαίῳ κόλπῳ οἰκημένῃ, ἀπ' ἧς καὶ ὁ κόλπος οὗτος τὴν ἐπωνυμίην ἔχει· ταύτῃ γὰρ ἐπυνθάνετο συντομώτατον εἶναι· μέχρι μὲν γὰρ Ἀκάνθου ὧδε τεταγμένος ὁ στρατὸς ἐκ Δορίσκου τὴν ὁδὸν ἐποιέετο· τρεῖς μοίρας ὁ Ξέρξης δασάμενος πάντα τὸν πεζὸν [στρατὸν] μίαν αὐτέων ἔταξε παρὰ θάλασσαν ἰέναι ὁμοῦ τῷ ναυτικῷ.—c. 121.

(B).—Plato—*Apology of Socrates.*

ὡς ὤνησας, ὅτι μόγις ἀπεκρίνω ὑπὸ τουτωνὶ ἀναγκαζόμενος· οὐκοῦν δαιμόνια μὲν φῄς με καὶ νομίζειν καὶ διδάσκειν, εἴτ' οὖν καινὰ εἴτε παλαιά. ἀλλ' οὖν δαιμόνιά γε νομίζω κατὰ τὸν σὸν λόγον, καὶ ταῦτα καὶ διωμόσω ἐν τῇ ἀντιγραφῇ. εἰ δὲ δαιμόνια νομίζω καὶ δαίμονας δήπου πολλὴ ἀνάγκη

νομίζειν μέ ἐστιν· οὐχ οὕτως ἔχει; ἔχει δή· τίθημι γάρ σε ὁμολογοῦντα, ἐπειδὴ οὐκ ἀποκρίνει.

Transcribe the following passage, with stops and accents, and translate it :—

ισως γαρ ουν αν τις ειποι σιγων δε και ησυχιαν αγων ω Σωκρατες ουχ οιος τ' εσει ημιν εξελθων ζην τουτι δη εστι παντων χαλεπωτατον πεισαι τινας υμων εαν τε γαρ λεγω οτι τω θεω απειθειν τουτ' εστι και δια τουτ' αδυνατον ησυχιαν αγειν ου πεισεσθε μοι ως ειρωνευομενω εαν τ' αν λεγω οτι ο ανεξεταστος βιος ου βιωτος ανθρωπω τουτο ετι ηττον πεισεσθε μοι λεγοντι.

Translate into Greek :—

Unless it happen either that philosophers acquire the kingly power in states, or that those who are now called kings and potentates, be imbued with a sufficient measure of genuine philosophy, that is to say, unless political power and philosophy be united in the same person, most of those minds which at present pursue one to the exclusion of the other being peremptorily debarred from either, there will be no deliverance for cities, nor yet, I believe, for the human race.

JOHN RYALL, *Professor.*

LATIN.—FIRST YEAR'S SCHOLARSHIPS.

1. Give an account of the war with Jugurtha.
2. Describe the situation of Pompeii, Patavium, Camulodunum, and Saguntum. Trace the course of the rivers Athesis, Tiber, and Sequana.
3. How is the word "any" translated into Latin?
4. Give the rules for the Alcaic metre, with examples from Horace.
5. How did the Romans reckon interest?

Re-translate into Latin :—

Here you see the Athenians, whence humanity, learning, religion, the fruits of the earth, the rights and laws of mankind, are thought to have been first propagated, for the possession of whose city the gods themselves are said to have contended on the account of its beauty; which is of so great antiquity, that it is reported to have brought forth its own citizens, and the same spot to have been their parent, their nurse, and their country; and of so great authority, that the broken and shattered fame of Greece depends now singly on the credit of this city.

SECOND AND THIRD YEARS' SCHOLARSHIPS.

Translate in as few words as possible :—

VIRGIL—*Æneid*, vi., 724.

Principio coelum ac terras camposque liquentes
Lucentemque globum Lunae Titaniaque astra
Spiritus intus alit, totamque infusa per artus
Mens agitat molem et magno se corpore miscet.
Inde hominum pecudumque genus vitaeque volantum
Et quae marmoreo fert monstra sub aequore pontus.
Igneus est ollis vigor et coelestis origo
Seminibus, quantum non noxia corpora tardant
Terrenique hebetant artus moribundaque membra.
Hinc metuunt cupiuntque, dolent gaudentque, neque auras
Dispiciunt clausae tenebris et carcere caeco.

Translate into Latin Elegiacs :—

Enlarge my life with multitude of days,
In health, in sickness, thus the suppliant prays;
Hides from himself his state, and shuns to know,
That life protracted, is protracted woe.

Appendix B.
Examination Papers for Scholarships.

Time hovers o'er, impatient to destroy,
And shuts up all the passages of joy;
In vain their gifts the bounteous seasons pour,
The fruit autumnal, and the vernal flow'r;
With listless eyes the dotard views the store,
He views, and wonders that they please no more.

Translate into Latin prose:—

He was fond of licence and pleasure, but not even his ruling passions ever withdrew him from the most regular attendance to public business and the affairs of his kingdom. His knowledge of mankind was profound, and he had sought it in the private walks of life, in which he often personally mingled; and, though naturally proud and haughty, he hesitated not, with an inattention to the arbitrary divisions of society, which was then thought something portentously unnatural, to raise from the lowest rank men whom he employed on the most important duties, and knew so well how to choose them, that he was rarely disappointed in their qualities.

Senior Scholarship.

Subject for a Latin essay:—

"E cælo descendit *γνῶθι σεαυτόν*"

Translate into Latin lyrics:—

Ye winds, that have made me your sport,
Convey to this desolate shore
Some cordial endearing report
Of a land I shall visit no more.

My friends, do they now and then send
A wish or a thought after me?
O tell me I yet have a friend,
Though a friend I am never to see.

How fleet is a glance of the mind!
Compared with the speed of its flight,
The tempest itself lags behind,
And the swift-winged arrows of light.

When I think of my own native land,
In a moment I seem to be there;
But alas! recollection at hand,
Soon hurries me back to despair.

B. Lewis, *Professor.*

English Language.—Literary Scholarships of the First Year.

1. Give the derivation of the following words:—*apprehend, censure, concussion, incidence, prevent, resent;* and point out any changes of signification which some of these words have undergone.

2. Analyse this sentence:—

Fame is the spur that the clear spirit doth raise
(That last infirmity of noble mind)
To scorn delights and live laborious days.

3. State what you know about the analysis of sentences. On what principle is that method of analysis founded?

4. What is the English language? Is it pure or mixed?

5. What is meant by the Latin of the First and of the Second Period?

History.

6. Describe the administration of the Thirty Tyrants, and the enterprise of Thrasybulus.
7. Explain the causes of the Civil War between Cæsar and Pompey.

English Language and Literature.—Literary Scholarships of the Second and Third Years.

1. Trace the origin and development of the Anglo-Saxon and Norman-French elements in the English language.
2. Give some account of the "Ormulum."
3. Write a short life of Edmund Spenser, with an enumeration of his writings.
4. Consider the poetic influence of Ben Jonson.
5. What was Drayton's "Polyolbion"?
6. Characterize the poetry of Donne.
7. Sketch the plot of "Julius Cæsar."
8. Explain the following passages:—

(*a*). If it were done, when 'tis done, then 'twere well
It were done quickly.

(*b*). If the assassination
Could trammel up the consequence, and catch
With his surcease, success; that but this blow
Might be the be-all and the end-all here,
But here upon this bank and shoal of time,
We'd jump the life to come.

(*c*). Will all great Neptune's ocean wash this blood
Clean from my hand? No; this my hand will rather
The multitudinous seas incarnadine,
Making the green one red.

Do you prefer "incarn*a*rdine" or "incarn*a*dine"?
Do you construe "making the green one—red" or "making the green—one red"?

English Language, Literature, and Composition.—Senior Scholarship.

1. Show that the English Language, like the Law and the Constitution of the country, partakes of the nature of a compromise.
2. What is Literature? Consider the departments of Poetry, History, Oratory, and Philosophy, and suggest a useful course of English reading in each department.
3. What is Composition? What are the best exercises in English composition, with a view to improvement, (1) in diction, (2) in the arrangement of thoughts?

History.

4. What was the origin of the Feudal System? Distinguish between alodial and feudal tenures. At what period did alodial tenures chiefly become feudal, and what was the cause of this change?
5. Describe the ceremonies used in conferring a fief; and enumerate the principal feudal incidents.
6. What causes led to the decline of the Feudal System?
7. What was the constitution of the Witenagemot?
8. Give a brief account of the Anglo-Norman constitution.
9. Explain the changes which took place in English jurisprudence during the reign of Henry II.
10. Trace the origin and establishment of Trial by Jury.

William Rushton, *Professor.*

Appendix B.

Examination Papers for Scholarships.

Modern Languages.

Translate into French, or Italian, or German:—

Times glide on; fortune is inconstant; tempers are soured; bonds which seemed indissoluble are daily sundered by interest, by emulation, or by caprice. But no such cause can affect the silent converse which we hold with the highest of human intellects. That placid intercourse is disturbed by no jealousies or resentments. They are the old friends who are never seen with new faces, who are the same in wealth and in poverty, in glory and in obscurity. With the dead there is no rivalry. In the dead there is no change. Plato is never sullen. Cervantes is never petulant. Demosthenes never comes unseasonably. Dante never stays too long. No difference of political opinion can alienate Cicero. No heresy can excite the horror of Bossuet. Nothing, then, can be more natural than that a person endowed with sensibility and imagination should entertain a respectful and affectionate feeling towards those great men with whose minds he holds daily communion.—Macaulay.

1. Explain the difference existing in the French language between the Imperfect and the Preterite of the Indicative mood, and illustrate it by examples.
2. Explain the signification of the following words, with examples:—*corvée, jurande, gabelle, taille, tiers-état.*
3. Mention and characterize the principal tragedies of Racine.
4. Which was the most brilliant epoch of French literature?
5. What was the moral and intellectual influence of Port Royal?
6. Give a brief account of the origin and formation of the Italian language.
7. State what you know of the life and times of Dante.
8. Explain the influence of English literature on that of Germany.
9. State what you know of Klopstock, and characterize his epic poem.
10. Give your opinion as to the tendency of the different literatures of modern Europe.

R. De Vericour, *Professor.*

Metaphysics.—Senior Scholarship.

1. How far is the objection that Metaphysics is not a progressive science justified by facts?
2. Is there any resemblance between Leibnitz's theory of Monads and the conclusions of Spinoza?
3. In what sense did Berkeley deny the existence of matter? Examine his arguments.
4. Explain what is meant by Ideas of Reflection in Locke's system.
5. What province is assigned to the idea of "Time" by Kant?
6. Explain and discuss the answers to Hume's scepticism which result from the system of Kant.
7. What objections have been brought against Kant's own system?
8. What is meant by the "Eclectic" system? On what principles is it based?
9. Criticise Reid's account of first principles.
10. Upon what does our conviction of the truth of mathematical axioms depend?
11. Give the arguments upon which Sir W. Hamilton rests the evidence of his law of the relation between Sensation and Perception. Are they satisfactory?
12. In what sense is the imagination a "creative" faculty?

Logic.—Senior Scholarship.

1. Is judgment or simple apprehension the more elementary form of thought?
2. To what extent is accurate definition a protection against error in reasoning?
3. What are "categories"? Have they any but an ideal existence? What is the best list of them?
4. Is there any *inference* in opposition and conversion?
5. How does the law of contradictory terms affect conversion by negation?
6. What is the province of the major premiss according to Mill? Examine his view.
7. What is the most common cause of fallacies of petitio principii?
8. Why is it unnecessary to subdivide fallacies of ratiocination?

9. What is the law upon which all induction depends? Upon what evidence, according to Mill, does this law rest? Discuss his account of it.

10. What are the limits to the value of arguments from analogy?

11. Are there any grounds for the distinction between the "inconceivable" and the "unimaginable"?

12. "Three-fourths of the army were killed; three-fourths of the army were Prussians; some who were killed were Prussians." Is the inference contained in the above capable of being reduced into one of the ordinary forms of syllogism? If so, reduce it; if not explain its nature.

G. S. READ, *Professor.*

MATHEMATICS.—FIRST YEAR'S SCHOLARSHIP.

1. Find the present value of £203 10*s.* due 7 months hence, interest at 3 per cent.

2. Prove the rule for finding the G. C. M. of two algebraical expressions; and find the G. C. M. of x^3+x^2+x+1, x^3-x^2+x-1.

3. Solve the equations—

(1) $\frac{1}{3}(x-7)+\frac{2}{3}(x-8)=\frac{5}{6}(5x-1)$.

(2) $(x-7)(x-4)(x-6)=(x-5)(x-2)(x-10)$.

(3) $\sqrt{x-1}+\sqrt{x-2}=\sqrt{2x}$.

4. Show how to sum an arithmetical progression—

Ex. $\overline{a+b}+\overline{a-3b}+\overline{a-7b}+\ldots$ to s terms.

5. Show that Euclid's definition of proportion is equivalent to the algebraical definition—

If $a : b :: c : d$ show that $a^3-b^3 : a^3+b^3 :: c^3-d^3 : c^3+d^3$.

6. The square on the hypothenuse of a right-angled triangle is equal to the sum of the squares on the sides of the triangle?

7. Show how to divide a given straight line into two parts, so that the rectangle contained by the whole line and one part may be equal to the square on the other part.

8. Show how to draw a tangent to a given circle from a given external point.

9. Describe a circle touching two given lines, and passing through a given point.

10. Prove that $\sin^2 A+\cos^2 A=1$. And that if $\tan A=\frac{a}{b}$ then $\sin A=\frac{a}{\sqrt{a^2+b^2}}$.

11. Find the sine and cosine of 45°.

12. Prove that $\sin(A+B)=\sin A\cos B+\cos A\sin B$. Hence deduce $\sin A+\sin B=2\sin\frac{A+B}{2}\cos\frac{A-B}{2}$.

13. Prove the following identities—

(1) $\sin(45°-A)+\cos(45°-A)=\sqrt{2}\cos A$.

(2) $\sec^2\theta+\operatorname{cosec}^2\theta=4\operatorname{cosec}^2 2\theta$.

(3) $\frac{\sin 3\theta+\sin 5\theta}{\sin 2\theta+\sin 6\theta}=\cos\theta\sec 2\theta$.

SECOND YEAR'S SCHOLARSHIP.

1. Solve equations—

(1) $\sqrt{x-1}+\sqrt{x-2}=\sqrt{2x-3}$.

(2) $3x^4+x^2(12a-2)+9a^2=1$.

(3) $\left.\begin{aligned} x^n-y^n&=ax^{\frac{n}{2}}y^{\frac{n}{2}} \\ x-y&=bxy \end{aligned}\right\}$

2. Give an accurate definition of a fraction. Thence prove $\frac{a}{b}+\frac{c}{d}=\frac{ad+bc}{bd}$. How must the ordinary definition be extended to prove that $\frac{a}{b}\times\frac{c}{d}=\frac{ac}{bd}$ and $\frac{a}{b}\div\frac{c}{d}=\frac{ad}{bc}$?

Appendix B.

Examination Papers for Scholarships.

3. Show that the value of the fraction $\frac{la^n+mc^n+re^n+\ldots}{lb^n+md^n+rf^n+\ldots}$ lies between the greatest and least of the fractions $\frac{a^n}{b^n}$, $\frac{c^n}{d^n}$, &c.

4. Prove that

$$(a-b)^n+n(a-b)^{n-1}.\,2b+\frac{n(n-1)}{1.2}(a-b)^{n-2}\,2^2b^2+\text{ &c.}$$
$$=(a+3b)^n-n(a+3b)^{n-1}.\,2b+\frac{n(n-1)}{1.2}(a+3b)^{n-2}\,2^2b^2-\text{ &c.}$$

5. Expand a^x in powers of x.

Sum the series $1+\frac{x}{\underline{|2}}+\frac{x^2}{\underline{|4}}+\frac{x^3}{\underline{|6}}+\ldots$.

6. Prove the identities—

(1) $\frac{\sin 3\theta+\sin 5\theta}{\sin 2\theta+\sin 6\theta}=\cos\theta.\sec 2\theta.$

(2) $(3+2\sin 2\theta)\sin(\theta+\frac{\pi}{4})+\cos(3\theta+\frac{\pi}{4})=4\sin(\theta+\frac{\pi}{4})$.

7. Solve the equations—

(1) $\tan(\theta-\alpha)-\tan(\theta+\alpha)=2\tan\alpha.$

(2) $\begin{cases}\tan\theta\tan\phi+\tan\phi\tan\psi+\tan\psi\tan\theta=\tan\theta\tan\phi\tan\psi\\ l\theta+m\phi+n\psi=0,\\ \cos\theta=\sin\phi.\end{cases}$

8. Show that $\sin\theta<\theta>\theta-\frac{\theta^3}{4}$.

Find accurately to five places of decimals the sine of $10''$.

9. In any triangle show that $c^2=a^2+b^2-2ab\cos C$. Find the values of $\sin\frac{C}{2}$ and $\cos\frac{C}{2}$ in terms of s, a, b, c.

10. A ladder resting against a vertical wall and on a horizontal plane, in a plane perpendicular to the two planes, begins slowly to slide down. Find by Euclid the curve described by the middle point of the ladder.

11. Find by Euclid's method the locus of a point whose distance from a given point is always in a constant ratio to its distance from a second given point.

THIRD YEAR'S SCHOLARSHIP.

1. Solve the equations—

(1) $3x^4+x^2(12a-2)+9a^2=1.$

(2) $\begin{cases}x^n-y^n=ax^{\frac{n}{2}}y^{\frac{n}{2}}\\ x-y=bxy\end{cases}$

2. Show that the value of the fraction $\frac{la^n+mc^n+re^n+\ldots}{lb^n+md^n+rf^n+\ldots}$ lies between the greatest and least of the fractions $\frac{a^n}{b^n}$, $\frac{c^n}{d^n}$, &c.

3. Sum the series $1+\frac{x}{\underline{|2}}+\frac{x^2}{\underline{|4}}+\frac{x^3}{\underline{|6}}+\ldots$.

4. Find the relation that exists between the roots and coefficients of an algebraical equation of the nth degree.

5. If α, β, γ, &c., be the roots of the equation $x^{2n}+px^{2n}+q=0$, show $\alpha^{2n+1}+\beta^{2n+1}+\gamma^{2n+1}+\ldots=0$.

6. Eliminate x and y from the equations—

$$ax^2+2bxy+cy^2=d$$
$$a'x^2+2b'xy+c'y^2=d'$$
$$a''x^2+2b''xy+c''y^2=d''$$

expressing the result in the form of a determinant.

7. Prove Demoivre's theorem—

Show that $\left(\frac{1-\sqrt{-1}\tan\theta}{1+\sqrt{-1}\tan\theta}\right)^{\sqrt{-1}} = \epsilon^{2\theta}$.

8. In the parabola show that the two tangents drawn to the curve from any external point subtend equal angles at the focus.

9. In the ellipse prove that the locus of intersection of the tangent with the perpendicular on it from the focus is a circle whose radius is equal to half the major axis.

10. Find the limit of $(1+x)^{\frac{1}{x}}$ when x is indefinitely diminished.

11. Prove Taylor's theorem—

Expand $\log\{1+e^x\}$ in powers of x for the first five terms.

12. Show how to find the maxima or minima values of a function of one independent variable.

13. Find the area of the greatest triangle that can be inscribed in a given circle.

14. Show how to find the evolute of a given curve. Show that the evolute of an equiangular spiral is a similar curve.

15. Define the integral $\int_a^b \phi(x)\,dx$, and show directly from some definition that the integral of $\cos x$ is $\sin x$.

16. Find the whole area of the curve $r=a(\sin\theta+\cos\theta)$.

NATURAL PHILOSOPHY.—SENIOR SCHOLARSHIP.

1. Find the centre of gravity of the segment of a sphere cut off by a given plane.

2. When a system of bodies are in equilibrium under the action of gravity the centre of gravity of the system is at a maximum or minimum height; apply this principle to determine the position of equilibrium of a heavy beam resting on two smooth inclined planes.

3. In a central orbit prove that every *apsidal* line divides the orbit into two parts which are equal and similar?

4. One particle begins to fall from the higher extremity of a vertical line, and at the same instant another is projected upwards from the other extremity with a given velocity, the particles moving in a medium of which the resistance varies directly as the velocity; find the time at which they will meet.

5. Describe and explain the phenomena which are seen on observing a small hole in an opaque screen.

6. How would you cause a current to rotate round the pole of a magnet?

7. How would you determine when Venus is at its maximum brightness?

8. Find the relation between the true and eccentric anomalies.

JOHN ENGLAND, *Professor.*

CHEMISTRY.—SENIOR SCHOLARSHIPS IN ARTS OF THE FOURTH YEAR.

1. What is the distinction between equivalents, atoms, and molecules?

2. Write the formulæ of primary, secondary, and tertiary monamines, produced by the substitution of an alcohol compound radical for the typical hydrogen. To which of these classes do the natural alkaloids belong?

3. Give the different processes for preparing ozone. What are its properties, and how is its presence in the atmosphere detected?

4. Write some of the oxides that are isomorphous with magnesia and with sesquioxide of iron. Illustrate in symbols the doctrine of isomorphism by the formation of different alums from oxides, isomorphous with potash, and with alumina.

5. Give an outline of the metallurgy of lead, and of the process for extracting economically from it the small quantity of silver which it contains.

6. What is the rule by which you judge of the neutrality of the salts of monobasic, bibasic, and tribasic acids? Illustrate these rules by formulæ of each class of acids with a protoxide and with a sesquioxide.

Appendix

Examination Papers for Scholarships.

7. How is the hypothetical density of a vapour ascertained?

8. How is hypochlorous acid prepared? Give its composition by weight and by volume, its properties, and the mode of preparing its most valuable compound with lime.

9. Explain the nature of homologous series, and describe the process for preparing the ketones of the different series.

10. One hundred grains of a vegetable alkaloid give on combustion with oxide of copper and with soda lime—

C = 71·58
H = 6·66
N = 4·91
O = 16·85

100·

100 grains of the double salt of bicloride of platinum and the alkaloid give on combustion 20·14 grains metallic platinum. Calculate the formula of the alkaloid—Pt = 99.

11. How is ascetic acid prepared in the quick German process? Show by symbols what substance is apt to be formed if there is a deficient supply of air. State the homologous series to which ascetic acid belongs.

12. In the square prismatic system, what are the relations and the positions of the lateral axes of the primary and of the secondary octohedron? Give the notation of the faces of both octohedrons and of the prism with terminal face derived from the inverse octohedron.

J. Blyth, *Professor.*

Natural History.—Senior Scholarship.

1. When are the ends of scientific classification best answered?

2. Explain the general truth, that there are in nature distinctions of Kind.

3. Distinguish between the nomenclature and terminology of botanical science.

4. Define the terms—*ligule*, *glume*, *corona*, *carpophore*, and *cupule*, adding illustrative examples.

5. Describe the structure of an ordinary anther, and the development of its pollen-grains.

6. Give some account of the geographical distribution of the Gramineæ.

7. Name the primary groups of 'deciduate' Mammals, giving the characters of such as are distinguished by modifications of placental structure.

8. Indicate the more striking peculiarities of the skeleton in the Cetacea.

9. Describe the skull (or cranial region) of Amphioxus.

10. What characters are common to, and distinctive of, the true Mollusca?

J. Reay Greene, *Professor.*

Natural Philosophy.—Third Year's Scholarship in Engineering.

1. One end of a beam rests on a smooth inclined plane, the other end is supported by a cord; required the tension in the cord, and the inclination of the cord to the beam, when the beam rests horizontally.

2. The resultant of two forces P and A trisects the angle between their directions; find this angle.

3. A weight P hanging vertically draws an equal weight up a smooth inclined plane, rising 2 in 3, by a string which passes along the plane; required the accelerating force and the tension in the string.

4. Two given circles lie without each other in the same vertical plane; determine the straight line of quickest descent from one to the other.

5. Describe the continuation of the *eye-piece* usually employed in the terrestrial telescope.

6. What do you mean by the mechanical equivalent of heat?

7. How, by means of the electrical machine, would you prove that electricity can produce heat and chemical action?

8. By what experiments is it usual to show that electricity resides on the surface of a charged body? Is this statement strictly accurate?

John England, *Professor.*

Examination Papers for Scholarships.

GEOLOGY AND MINERALOGY.—THIRD YEAR'S ENGINEERING SCHOLARSHIPS.

1. What are the Felspars which enter into the composition of Granite; and in what respects do these differ from the Felspars of Igneous Rocks?

2. What influence have currents on the characters of Sedimentary Rocks? and give examples of this influence.

3. Name the areas in Ireland where Metamorphic Rocks occur; and what are the kinds of Metamorphic Rocks in these areas?

4. To what portions of the Silurian system are the Rocks of this system in Ireland referable?

5. In what respects does the Rhœtic formation of the British Islands differ from that of Austria.

6. To what formation is the Molasse of Switzerland referable; and what are the fossils which occur therein?

7. To what group of fossils does *Paradoxoides* belong; and what zone does it characterize?

8. Name, and refer to their position in the animal kingdom, some of the most interesting fossils which have been obtained from the Stonesfield Slate.

9. What genus of shells occurs in the greatest abundance in the Calcaire Grossier?

10. In what respect does Dolomitic Limestone differ from ordinary Limestone; and under what circumstances does it occur in the south of Ireland?

11. As regards composition, in what respect do Zeolites differ from Felspars?

12. Name, and give the external characters, of the three minerals which are composed of Iron and Sulphur.

ROBERT HARKNESS, *Professor.*

CHEMISTRY.—SCHOLARSHIPS IN MEDICINE AND ENGINEERING.

N.B.—The name and faculty of each student are to be written on the first page of each book.

1. What is the composition of the atmosphere by weight and by volume? How is its uniformity of composition accounted for?

2. Give the different processes for obtaining nitrogen from the air and from ammonia. State the composition by weight and by volume of the oxygen compounds of nitrogen.

3. How are chlorine and hydrochloric acid prepared? Give the properties of each.

4. Give the mode of preparation and the properties of HF, and its action on silicate of potash and alumina.

5. What is meant by the theory of volumes? Give according to this theory the formation by synthesis of ammonia, hydrochloric acid, water, and sulphuretted hydrogen.

6. Into how many classes are acids arranged? Write the formulæ of the three hydrates which PO_5 forms, according to the two theories of the constitution of acids.

7. In lead there exists a small quantity of silver; how can this be economically extracted from the mass of lead?

8. How is teroxide of antimony prepared from the native sulphide? What is the action of water upon it? How would you distinguish the product of this action from the similar one produced by water on chloride of bismuth?

9. The terminal edges of the octohedron of the square prismatic system are truncated by planes, which by increasing replace the original faces; what new figure is formed? Give the notation of its faces, and of the prism derived from it.

10. How would you detect hydrocyanic acid vapour? Give the reactions in symbols with the different reagents you employ.

11. How is acetic acid formed in the quick German process? Show by symbols what substance is apt to be produced instead of acetic acid, if there is not a sufficient supply of air. State the homologous series to which acetic acid belongs.

Appendix B.

Examination Papers for Scholarships.

12. Explain the difference between an equivalent, an atom, and a molecule.

13. When monatomic sodium acts on hydrochloric acid and on ammonia, how many new compounds are possible in each case? Explain this by the atomicity of the elements.

14. Illustrate both by atomic and by molecular notation, the action of chlorine and of oxygen on hydriodic acid.

J. BLYTH, *Professor.*

FACULTY OF MEDICINE.

PHYSICS.—SCHOLARSHIPS OF SECOND YEAR.

1. A bar 12 feet long has a weight of 120 lbs. placed at one end and a weight of 40 lbs. at the other; at what point should a prop be placed to support it?

2. A heavy body in falling is observed to describe 176 feet in one second; what is the entire space which it has passed over?

3. Two bodies are projected from the same point at the same instant, the one vertically upward with a velocity of 100 feet per second, the other horizontally with a velocity of 20 feet per second; what distance will they be from each other at the end of four seconds?

4. Explain the principle of the camera lucida.

5. Explain the use of a concave glass to a short-sighted person. What rule would you give for determining its focal length?

6. By what means can polarized be distinguished from ordinary light?

7. Describe some experiments to prove that different solids expand differently when heated through equal changes of temperature.

8. One lb. of ice is placed in one gallon of water at a temperature of 120° Fah.; what will be the temperature when the ice is entirely dissolved?

9. How by means of a dipping needle would you approximately determine the magnetic meridian?

10. A gold leaf electroscope is charged with electricity; how would you ascertain whether the charge was positive or negative?

11. Describe Bunsen's battery.

12. Explain the reduction of copper from a solution of its sulphate by the passage of a current of electricity through it.

JOHN ENGLAND, *Professor.*

BOTANY.—SCHOLARSHIPS OF SECOND YEAR.

1. Compare the order Scrophularineæ, on the one hand, with Labiatæ, on the other, with Solanaceæ.

2. 3. Name the British genera and species of Solanaceæ, adding their distinctive characters.

4. Define the terms—*internode*, *plumule*, *connective*, *gynœcium*, and *raphe*.

5. Describe the spore-fruit of Equisetum.

ZOOLOGY.

1. Describe the proglottis of a Tape-worm.

2. Name any groups of Invertebrata in which the heart is distinct and unilocular.

3. Define the Lizards properly so called (Sauria s. Lacertilia), distinguishing them from Crocodilians and Ophidians.

4. Give the dental formula of the Marmosets, comparing it with that of the typical Platyrhini.

5. What families of hoofed quadrupeds occur in Southern and Tropical America.

J. REAY GREENE, *Professor.*

ANATOMY AND PHYSIOLOGY.—SCHOLARSHIPS OF THE SECOND YEAR.

1. What are the constituents of the blood?
2. What are the proportions of albumen and fibrine in the normal state of the blood?
3. What are the microscopic features of the red corpuscles of the human blood?
4. State the general properties of cartilage, and describe the appearance of this tissue when examined under the microscope.
5. Describe the structure and arrangements of the pia mater of the brain.
6. Mention the names of and course of the blood through the cranial sinuses.
7. State the parts brought in view, on incising the kidney, from the renal fissure to the convex border.
8. State the relations of the trachea in the neck and chest; then describe the arrangements of the different parts which enter into its composition.

PRACTICAL ANATOMY.—SCHOLARSHIPS OF THE THIRD YEAR.

1. Describe the rectus abdominis muscle.
2. Describe the origin, insertion, and relations of the peroneus longus muscle.
3. Describe the internal and external lateral ligaments of the ankle joint.
4. Describe the spermatic canal, the internal and external abdominal rings.
5. Describe the origin, course, relations, and anastomoses of the deep epigastric artery.
6. Describe the superficial veins of the lower extremity.
7. Describe the origin, course, and branches of the ulnar nerve.

ANATOMY AND PHYSIOLOGY.—SCHOLARSHIPS OF THE THIRD YEAR.

1. What are the structures composing the coats of veins, and how are they disposed? What are the parts of the venous system, which present special arrangements?
2. Describe the general construction of the chest and the respiratory movements; mention the muscles and nerves concerned in these functions.
3. How is the influence of the nervous system on gastric digestion manifested?
4. What are the changes effected on alimentary substances in the small intestines?
5. What is the structure of the intestinal villi?
6. Describe the origin, course, and distribution of the phrenic nerve.
7. Describe the third ventricle of the brain.

PRACTICAL ANATOMY.—FOURTH YEAR SCHOLARSHIP.

1. Describe the tunica vaginalis, and the tunica albuginea testis.
2. Describe the spermatic cord, the structure, and course of the vas deferens.
3. Describe the fascia iliaca.
4. Describe the fascia transversalis abdominis.
5. Describe the acceleratores urinæ muscles.
6. Describe the triangular ligament of the urethra.
7. Describe the origin, course, and relations of the internal pudic artery.
8. Describe the obturator nerve.
9. Describe the inferior thyroid artery.

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1. Trace the common bile duct from the duodenum intestine upwards towards the liver, and describe the arrangements of the offsets to their terminations; also state the structures entering into the biliary apparatus.
2. State the composition and use of the bile.

Appendix B.
Examination Papers for Scholarships.

3. State the difference, both physical and chemical, between venous and arterial blood.
4. State the structure, connexions, and office of the membrana tympani.
5. State the connexions and structure of the optic thalami.
6. How is spherical aberration corrected in the eye?
7. Describe the lachrymal puncta, ducts sac, and nasal duct.
8. State the origin, course, branches of communication, and distribution of the glosso-pharyngeal nerve; also state its office.

J. H. CORBETT, *Professor.*

MIDWIFERY.—FOURTH YEAR'S SCHOLARSHIP.

1. Enumerate the peculiarities of the "masculine pelvis" and of the "ovate pelvis." What character of labour is to be expected with each of these varieties?
2. State the symptoms which are to be observed in the progress of a case of uterine hydatids, and its diagnosis from one of ordinary pregnancy; also its pathology, prognosis, and treatment.
3. If the head of the child enter the pelvis in the third position, and continue its course without change, how will it emerge from the outlet; and how will the progress of the labour be affected by the position remaining unchanged?
4. What indications in the condition of the pregnant woman would lead you to apprehend an attack of convulsions; and what means would you take to try and ward them off?
5. State in what forms of uterine hemorrhage you would have recourse to the plug, and in what forms you would not; and give your reasons.
6. Give an outline of the symptoms, pathology, and treatment of phlegmasia dolens.

J. (R.) HARVEY, A.B. M.D., *Professor.*

PATHOLOGY.—FOURTH YEAR'S SCHOLARSHIP.

1. What alterations are found in the properties of the urine in Bright's disease of the kidneys; how do you proceed to ascertain these changes?
2. How do you test for sugar in diabetic urine? What is the cause of its presence in this disease?
3. In what diseases does it appear secondarily?
4. What is the effect of adherent pericardium on the size of the heart? If there is any difference of opinion amongst writers on the subject state it, and also the cause of this difference.
5. What is the cause of increased heat in fever?
6. Enumerate some of the forms which exudate lymph assumes.
7. What organs are mainly affected in pyemia, and why these organs?
8. In what conditions are miasmatic emanations produced?
9. How do you explain the cramps, blue skin, and delirium in Asiatic cholera?
10. How do you diagnose it from endemic cholera?
11. What is the cause of the prevalence of hepatic affections in tropical climates?
12. What organs affect most in the different periods of life—namely, in infancy, childhood, and adult life?

D. C. O'CONNOR, M.D., *Professor*

MATERIA MEDICA.—THIRD YEAR SCHOLARSHIPS.

1. Give the characters, properties, test, physiological action, therapeutical applications, modes of administration, and doses of *Podophyllin.*
2. How is the *Pulvis Ferri* chemically distinguished from the *Magnetic Oxide?*
3. Give the characters, properties, tests, physiological action, therapeutical applications, mode of administration, and doses of *Muriate of Ammonia.*
4. Give the composition, tests, mode of detecting adulterations, advantages, and disadvantages of *Hydrocyanic Acid.*

5. Give the doses of *Muriate of Morphia*, *Elaterium*, *Strychnia*, *Bismuth*, and *Croton Oil*.

6. Describe the reactions which take place in the preparation of *Chloroform*, *Ether*, and *Valerianate of Soda*.

7. Give the natural history, constituents, physiological action, therapeutical uses, preparations, doses, and mode of administration of *Opium*.

Appendix B. Examination Papers for Scholarships.

THERAPEUTICS.—SENIOR SCHOLARSHIPS.

1. What changes can be effected in the functions of the *nervous system* by therapeutical agents?

2. How does *Morphia* differ in physiological action and therapeutical uses from *crude Opium?*

3. Give a general outline of the therapeutical applications of *stimulants*, classifying them according to the portions of the nervous system which they specially influence.

4. Contrast the therapeutical results of *Quinine* with those of *Arsenic* in the treatment of intermittent affections.

5. Give the relative value of the more generally employed *preparations of iron.*

6. Contrast the action of *Diaphoretics* with that of *Diuretics* in the treatment of Ascites.

7. How does the astringent action of *Acetate of Lead* differ from that of *Sulphuric Acid?*

PURCELL O'LEARY, *Professor.*

APPENDIX C.

Appendix C. List of the Students who obtained Honors or Prizes at the Sessional Examinations.

LIST of the STUDENTS who obtained HONORS or PRIZES at the SESSIONAL EXAMINATIONS held in June, 1867.

GREEK (Third Year).
- Benjamin Hamilton, . . 1st.

GREEK (Senior).
- Joseph O'Brien, . . . 1st.
- Thomas Rearden, . . } 2nd, equal.
- Michael Finucane, . } 2nd, equal.
- Maurice Daly, . . . 3rd.
- James Magill, . . . 5th.

GREEK (Junior).
- Timothy Nevill, . . . 2nd.
- Charles Crookshank, . } 3rd, equal.
- James Ring, . . } 3rd, equal.

LATIN (Third Year).
- William G. Fitzgerald, } 1st, equal.
- Benjamin Hamilton, } 1st, equal.
- John O'Driscol, . . . 3rd.
- Michael Molony, . . . 4th.

LATIN (Senior).
- Joseph O'Brien, . . . 1st,
- Maurice Daly, . . } 2nd, equal.
- Michael Finucane, . } 2nd, equal.
- James Hurley, . . . 4th.
- James Magill, . . } 5th.
- Thomas Horan, . . } 5th.
- Robert W. W. Jones, . . 7th.

LATIN (Junior).
- Bernard O'Connor, . . 1st.
- Timothy Nevill, . . . 4th.
- James Ring, . . . 6th.

FRENCH (Medical).
- Maxwell Fitzgerald, . . 3rd.

FRENCH (Senior).
- Bernard O'Connor, . . 3rd.
- James Magill, . . . 4th.

FRENCH (Junior).
- Henry Heazle, . . . 1st.
- Michael Finucane, . . 2nd.
- James Hurley, . . . 3rd.
- James Moran, . . . 4th.

NATURAL PHILOSOPHY (Arts, third year).
- Arthur Anglin, . . . 1st.

APPLIED MECHANICS.
- Joseph Thornhill, . . . 1st.

ENGINEERING PHYSICS.
- Roderick Kane, . . . 1st.

ENGLISH LITERATURE.
- William G. Fitzgerald, . . 1st.
- John O'Driscol, . . . 2nd.

HISTORY.
- William G. Fitzgerald, . 1st.
- Arthur Anglin, . . . 2nd.

ENGLISH LANGUAGE.
- Thomas Horan, . . . 1st.
- James Magill, . . . 2nd.
- Robert W. W. Jones, . . 3rd.

MATHEMATICS (Third Year).
- Arthur Anglin, . . . 1st.

METAPHYSICS.
- Stephen Ronan, . . . 1st.

POLITICAL ECONOMY.
- Stephen Ronan, . . . 1st.

LOGIC.
- Joseph O'Brien.

Appendix C. LIST of STUDENTS who obtained HONORS or PRIZES—*continued.*

List of the Students who obtained Honors or Prizes at the Sessional Examinations.

GEOLOGY AND MINERALOGY.
Exham Phillips.
George Addy.

CHEMISTRY.
Benjamin Phillips, . . 1st.
Exham Phillips, . . 2nd.
Simeon Exham, . . 3rd.

ENGINEERING (Third Year.)
Joseph Thornhill, . . 2nd.

ENGINEERING (Second Year).
Roderick Kane, . . . 1st.

ENGINEERING (First Year).
Benjamin Parkes, . . 1st.
Exham Phillips, . . } 2nd,
George Laffan, . . } equal.
James Jones, . . . 4th.

ANATOMY AND PHYSIOLOGY (First Year).
James C. Holland, . . 1st.

ANATOMY AND PHYSIOLOGY (Second Year).
Alexander S. Merrick, . . 1st.
James M. Beamish, . . 2nd.
Matthew M. O'Connell, . 3rd.

PRACTICAL ANATOMY (Second Year).
Matthew M. O'Connell, . 1st.
Alexander S. Merrick, . 2nd.

PRACTICAL ANATOMY (Third Year).
John O'Donovan, . . 1st.
John F. Fitzpatrick, . . 2nd.

PRACTICAL CHEMISTRY.
Alexander S. Merrick, . . 1st.
Samuel Young, . . . 2nd.
Samuel Hawkes, . . . 3rd.
John Enright, . . } 4th.
Charles Plowman, . }

MATERIA MEDICA.
Alexander S. Merrick, . . 1st.
William J. Hastings, . . 2nd.
Philip Cogan, . . . 3rd.

SURGERY.
John F. Fitzpatrick, . . 1st.
Thomas Lumsden, . } 2nd,
Timothy M'Auliffe, . } equal.
John Donovan, . . . 4th.

MIDWIFERY.
John Donovan, . . . 1st.
William Newsam, . } 2nd.
James Beamish, . }
Timothy M'Auliffe, . . 3rd.
John F. Fitzpatrick.

PRACTICE OF MEDICINE.
Robert D. Corbett, . } 1st,
Matthew M. Galway, . } equal.
Patrick Cremen, . . } 3rd,
Patrick Martin, . . } equal.
William T. T. Robinson, }

MEDICAL JURISPRUDENCE.
Robert D. Corbett.
Matthew M. Galway.

Appendix D.

Selection of Papers used at the Sessional Examinations.

APPENDIX D.

SELECTION OF PAPERS OF QUESTIONS USED AT THE SESSIONAL EXAMINATIONS HELD IN JUNE, 1867.

SENIOR GREEK CLASS.

Translate:—

(A.)—DEMOSTHENES—*In Midiam*, c. 21.

Οὐδὲ γὰρ αὖ τοῦτ' ἔστιν εἰπεῖν, ὡς οὐ γεγενημένου πώποτ' οὐδενὸς ἐκ τῶν τοιούτων δεινοῦ τῷ λόγῳ τὸ πρᾶγμ' ἐγὼ νῦν αἴρω καὶ φοβερὸν ποιῶ. πολλοῦ γε καὶ δεῖ. ἀλλ' ἴσασιν ἅπαντες, εἰ δὲ μή, πολλοί γε, Εὔθυνον τὸν παλαίσαντά ποτ' ἐκεῖνον, τὸν νεανίσκον, Σώφιλον τὸν παγκρατιαστήν (ἰσχυρός τις ἦν, μέλας, εὖ οἶδ' ὅτι γιγνώσκουσί τινες ὑμῶν ὃν λέγω,) τοῦτον ἐν Σάμῳ ἐν συνουσίᾳ τινὶ καὶ διατριβῇ οὕτως ἰδίᾳ, ὅτι τύπτων αὐτὸν ὑβρίζειν φαίνοιτο, ἀμυνάμενον οὕτως ὥστε καὶ ἀποκτεῖναι. ἴσασιν Εὐαίωνα πολλοὶ τὸν Λεωδάμαντος ἀδελφὸν ἀποκτείναντα Βοιωτὸν ἐν δείπνῳ καὶ συνόδῳ κοινῇ διὰ πληγὴν μίαν. οὐ γὰρ ἡ πληγὴ παρέστησε τὴν ὀργήν, ἀλλ' ἡ ἀτιμία· οὐδὲ τὸ τύπτεσθαι τοῖς ἐλευθέροις ἐστὶ δεινόν, καίπερ ὂν δεινόν, ἀλλὰ τὸ ἐφ' ὕβρει. πολλὰ γὰρ ἂν ποιήσειεν ὁ τύπτων, ὦ ἄνδρες Ἀθηναῖοι, ὧν ὁ παθὼν ἕνια οὐδ' ἂν ἀπαγγεῖλαι δύναιθ' ἑτέρῳ, τῷ σχήματι, τῷ βλέμματι, τῇ φωνῇ, ὅταν ὡς ὑβρίζων, ὅταν ὡς ἐχθρὸς ὑπάρχων, ὅταν κονδύλοις, ὅταν ἐπὶ κόρρης. ταῦτα κινεῖ, ταῦτ' ἐξίστησιν ἀνθρώπους αὐτῶν, ἀήθεις ὄντας τοῦ προπηλακίζεσθαι. οὐδεὶς ἂν, ὦ ἄνδρες Ἀθηναῖοι, ταῦτ' ἀπαγγέλλων δύναιτο τὸ δεινὸν παραστῆσαι τοῖς ἀκούουσιν οὕτως, ὡς ἐπὶ τῆς ἀληθείας καὶ τοῦ πράγματος τῷ πάσχοντι καὶ τοῖς ὁρῶσιν ἐναργὴς ἡ ὕβρις φαίνεται.

1. Analyse carefully the construction of that portion of the extract from ἀλλ' ἴσασιν ἅπαντες to ὥστε καὶ ἀποκτεῖναι.

2. Explain the following legal terms—ἐξούλη, εἰσαγγελία, προβόλη, παραγραφή, ὑπωμοσία, ἀνθυπωμοσία.

3. Translate and comment on the following passage:—δίκην δὲ τούτῳ λαχὼν ὕστερον τῆς κακηγορίας εἶλον ἐρήμην, οὐ γὰρ ἀπήντα· λαβὼν δ' ὑπερήμερον καὶ ἔχων, οὐδενὸς ἠψάμην πώποτε τῶν τούτου, ἀλλὰ λαχὼν ἐξούλης πάλιν οὐδέπω καὶ τήμερον εἰσελθεῖν δεδύνημαι· τοσαύτας τέχνας καὶ σκήψεις οὗτος εὑρισκων ἐκκρούει.

(B.)—Thucydides, book i., c. 12.

Ἐπεὶ καὶ μετὰ τὰ Τρωικὰ ἡ Ἑλλὰς ἔτι μετανίστατό τε καὶ κατῳκίζετο, ὥστε μὴ ἡσυχάσασαν αὐξηθῆναι. ἥ τε γὰρ ἀναχώρησις τῶν Ἑλλήνων ἐξ Ἰλίου χρονία γενομένη πολλὰ ἐνεόχμωσε, καὶ στάσεις ἐν ταῖς πόλεσιν ὡς ἐπὶ τὸ πολὺ ἐγίγνοντο, ἀφ' ὧν ἐκπίπτοντες τὰς πόλεις ἔκτιζον. Βοιωτοί τε γὰρ οἱ νῦν ἑξηκοστῷ ἔτει μετὰ Ἴλιον ἅλωσιν ἐξ Ἄρνης ἀναστάντες ὑπὸ Θεσσαλῶν τὴν νῦν Βοιωτίαν, πρότερον δὲ Καδμηίδα γῆν καλουμένην ᾤκισαν (ἦν δὲ αὐτῶν καὶ ἀποδασμὸς πρότερον ἐν τῇ γῇ ταύτῃ, ἀφ' ὧν καὶ ἐς Ἴλιον ἐστράτευσαν), Δωριῆς τε ὀγδοηκοστῷ ἔτει ξὺν Ἡρακλείδαις Πελοπόννησον ἔσχον. μόλις τε ἐν πολλῷ χρόνῳ ἡσυχάσασα ἡ Ἑλλὰς βεβαίως καὶ οὐκέτι ἀνισταμένη ἀποικίας ἐξέπεμψε, καὶ Ἴωνας μὲν Ἀθηναῖοι καὶ νησιωτῶν τοὺς πολλοὺς ᾤκισαν, Ἰταλίας δὲ καὶ Σικελίας τὸ πλέον Πελοποννήσιοι τῆς τε ἄλλης Ἑλλάδος ἔστιν ἃ χωρία. πάντα δὲ ταῦτα ὕστερον τῶν Τρωικῶν ἐκτίσθη.

1. Explain fully the historical and geographical allusions in extract (B).

2. Point out anything in the construction of the passage which you think worthy of notice.

(C.)—Translate into Greek:—

The Corcyræans, fearing that the enemy, on the strength of his victory, might sail against the city, and either rescue the men on the island, or proceed to some other violent measures, carried the men over again to the sanctuary of Juno, and kept the city under guard. The Peloponnesians, however, though victorious in the engagement, did not dare to sail against the city, but withdrew with thirteen of the Corcyræan vessels to the continent, whence they had put out.

Third Year's Greek Class.

(A.)—Translate:—

Thucydides, book iii., c. 53.

Τὴν μὲν παράδοσιν τῆς πόλεως, ὦ Λακεδαιμόνιοι, πιστεύσαντες ὑμῖν ἐποιησάμεθα, οὐ τοιάνδε δίκην οἰόμενοι ὑφέξειν, νομιμωτέραν δέ τινα ἔσεσθαι, καὶ ἐν δικασταῖς οὐκ ἐν ἄλλοις δεξάμενοι, ὥσπερ καὶ ἐσμέν, γενέσθαι ἢ ὑμῖν, ἡγούμενοι τὸ ἴσον μάλιστ' ἂν φέρεσθαι. νῦν δὲ φοβούμεθα μὴ ἀμφοτέρων ἅμα ἡμαρτήκαμεν· τόν τε γὰρ ἀγῶνα περὶ τῶν δεινοτάτων εἶναι εἰκότως ὑποπτεύομεν καὶ ὑμᾶς μὴ οὐ κοινοὶ ἀποβῆτε, τεκμαιρόμενοι προκατηγορίας τε ἡμῶν οὐ προγεγενημένης ᾗ χρὴ ἀντειπεῖν (ἀλλ' αὐτοὶ λόγον ᾐτησάμεθα) τό τε ἐπερώτημα βραχὺ ὄν, ᾧ τὰ μὲν ἀληθῆ ἀποκρίνασθαι ἐναντία γίγνεται, τὰ δὲ ψευδῆ ἔλεγχον ἔχει. πανταχόθεν δὲ ἄποροι καθεστῶτες ἀναγκαζόμεθα καὶ ἀσφαλέστερον δυκεῖ εἶναι εἰπόντας τι κινδυνεύειν· καὶ γὰρ ὁ μὴ ῥηθεὶς λόγος τοῖς ὧδ' ἔχουσιν αἰτίαν ἂν παράσχοι ὡς εἰ ἐλέχθη, σωτήριος ἂν ἦν· χαλεπῶς δὲ ἔχει ἡμῖν πρὸς τοῖς ἄλλοις καὶ ἡ πειθώ. ἀγνῶτες μὲν γὰρ ὄντες ἀλλήλων ἐπεισενεγκάμενοι μαρτύρια ὧν ἄπειροι ἦτε ὠφελούμεθ' ἄν· νῦν δὲ πρὸς εἰδότας πάντα λελέξεται, καὶ δέδιμεν οὐχὶ μὴ προκαταγνόντες ἡμῶν τὰς ἀρετὰς ἴσσους εἶναι τῶν ὑμετέρων ἔγκλημα αὐτὸ ποιῆτε, ἀλλὰ μὴ ἄλλοις χάριν φέροντες ἐπὶ διεγνωσμένην κρίσιν καθιστώμεθα.

1. Supply the ellipsis in ὥσπερ καὶ ἐσμέν; and point out the difference in the interpretation of the clause, according as the comma is retained or omitted after ὑμῖν.

2. Explain the construction of ὑμᾶς in the next sentence, also of τὸ ἐπερώτημα βραχὺ ὄν; and of φέροντες, in the last clause.

3. Explain fully the following historical allusions:—ἐναυμαχήσαμεν ἐπ' Ἀρτεμισίῳ—μάχῃ τῇ ἐν τῇ ἡμετέρᾳ γενομένῃ παρεγενόμεθα—τῶν ἐς Ἰθώμην Εἱλώτων ἀποστάντων.

Appendix D.

Selection of Papers used at the Sessional Examinations.

4. Describe the following localities:—Gerrestus, Methymna, Nisæa, Colophon, Notium.

(B.)—Translate into Greek:—

For afterwards, even the whole of Greece, so to say, was convulsed; struggles being everywhere made by the popular leaders to call in the Athenians, by the oligarchical party, the Lacedæmonians. Now they would have had no pretext for calling them in, nor have been prepared to do so, in time of peace. But when pressed by war, and when an alliance also was maintained by both parties for the injury of their opponents and for their own gain therefrom, occasions of inviting them were easily supplied to such as wished to effect any revolution. And many dreadful things befell the cities through this sedition, which occur, and always will occur, as long as human nature is the same, but in a more violent or milder form, and varying in their phenomena, as the several variations of circumstances may in each case present themselves.

Translate:—

ÆSCHYLUS—*Agamemnon*, vv. 664–715.

τίς ποτ' ὠνόμαζεν ὧδ' ἐς τὸ πᾶν ἐτητύμως—
μή τις ὄντιν' οὐχ ὁρῶμεν προφοίαισι τοῦ πεπρωμένου
γλῶσσαν ἐν τύχᾳ νέμων;—
τὰν δορίγαμβρον ἀμφινεικῆ θ' Ἑλέναν; ἐπεὶ πρεπόντως
ἑλένανς, ἔλανδρος, ἑλέπτολις,
ἐκ τῶν ἀβροπήνων
προκαλυμμάτων ἔπλευσε ζεφύρου γίγαντος αὔρᾳ,
πολύανδροί τε φεράσπιδες, κυναγοὶ κατ' ἴχνος
πλατᾶν ἄφαντον
κέλσαντες Σιμόεντος
ἀκτὰς ἐπ' ἀξιφύλλους
δι' ἔριν αἱματόεσσαν.
Ἰλίῳ δὲ κῆδος ὀρθώνυμον τελεσσίφρων
μῆνις ἤλασεν, τραπέζας ἀτίμωσιν ὑστέρῳ χρόνῳ
καὶ ξυνεστίου Διὸς
πρασσομένα τὸ νυμφότιμον μέλος ἐκφάτως τίοντας
ὑμέναιον, ὃς τότ' ἐπέρρεπε
γαμβροῖσιν ἀείδειν.
μεταμανθάνουσα δ' ὕμνον Πριάμου πόλις γεραιὰ
πολύθρηνον μέγα που στένει κικλήσκουσα Πάριν
τὸν αἰνόλεκτρον,
πάμπορθῆ, πολύθρηνον
αἰῶν' ἀμφὶ πολιτᾶν
μέλεον αἷμ' ἀναπλᾶσα.
ἔθρεψεν δὲ λέοντα
σίνιν δόμοις ἀγάλακτον
οὕτως ἀνὴρ φιλόμαστον,
ἐν βιότου προτελείοις
ἄμερον, εὐφιλόπαιδα,
καὶ γεραροῖς ἐπίχαρτον.
πολέα δ' ἔσχ' ἐν ἀγκάλαις
νεοτρόφου τέκνου δίκαν,
φαιδρωπὸς ποτὶ χεῖρα σαίνων τε γαστρὸς ἀνάγκαις.
χρονισθεὶς δ' ἀπέδειξεν
ἦθος τὸ πρὸς τοκέων·
χάριν γὰρ τροφεῦσιν ἀμείβων
μηλοφόνοισιν σὺν ἄταις
δαῖτ' ἀκέλευστος ἔτευξεν·
αἵματι δ' οἶκος ἐφύρθη·
ἄμαχον ἄλγος οἰκέταις,
μέγα σίνος πολυκτόνον.
ἐκ θεοῦ δ' ἱερεύς τις ἄτας δόμοις προσιθρέφθη.

1. (*a.*) Supply the verb in the clause beginning πολύανδροί τε φερέσπιδες κ.τ.λ., and translate with the readings κελσάντων, πλάταν. (*b.*) Point out the equivoque in κῆδος, and explain the construction of ἀτίμωσιν and τίοντας. (*c.*) Give the exact meaning and derivation of γαμβρός, and the different meanings that have been assigned to ἀγάλακτος. (*d.*) What is the literal meaning of προτέλεια? Explain the origin of the adverbial use of δίκαν. (*e.*) Give the various reading for ἔσχ', v. 702. Translate the clause beginning χάριν γὰρ τροφεῦσιν κ.τ.λ. with the reading χάριν τροφᾶς γὰρ ἀμείβων μηλοφόνοισιν ἀγαισιν κ.τ.λ.

2. Translate into Greek Iambics:—

How sweet the moonlight sleeps upon this bank!
Here will we sit, and let the sounds of music
Creep in our ears; soft stillness, and the night,
Become the touches of sweet harmony.
Sit, Jessica. Look, how the floor of heaven
Is thick inlaid with patines of bright gold:
There's not the smallest orb, which thou behold'st,
But in his motion like an angel sings,
Still quiring to the young-eyed cherubims:
Such harmony is in immortal souls;
But whilst this muddy vesture of decay
Doth grossly close it in, we cannot hear it.

SHAKESPEARE.

SENIOR GREEK CLASS.

Translate:—

(A.)—EURIPIDES—*Iphigenia in Aulide*, vv. 334–357.

νοῦς δέ γ' οὐ βέβαιος ἄδικον κτῆμα κοὐ σαφὲς φίλοις.
βούλομαι δέ σ' ἐξελέγξαι, καὶ σὺ μήτ' ὀργῆς ὕπο
ἀποτρέπου τἀληθές, οὔτε κατατενῶ λίαν ἐγώ.
οἶσθ' ὅτ' ἐσπούδαζες ἄρχειν Δαναΐδαις πρὸς Ἴλιον,
τῷ δοκεῖν μὲν οὐχὶ χρήζων, τῷ δὲ βούλεσθαι θέλων,
ὡς ταπεινὸς ἦσθα πᾶσι, δεξιᾶς προσθιγγάνων
καὶ θύρας ἔχων ἀκλήστους τῷ θέλοντι δημοτῶν,
καὶ διδοὺς πρόσρησιν ἐξῆς πᾶσι, κεἰ μή τις θέλοι,
τοῖς τρόποις ζητῶν πρίασθαι τὸ φιλότιμον ἐκ μέσου;
κἄπειτ' ἐπεὶ κατέσχες ἀρχάς, μεταβαλὼν ἄλλους τρόπους
τοῖς φίλοισιν οὐκέτ' ἦσθα τοῖς πρὶν ὡς πρόσθεν φίλος,
δυσπρόσιτος ἔσω τε κληθρων σπάνιος. ἄνδρα δ' οὐ χρεὼν
τὸν ἀγαθὸν πράσσοντα μεγάλα τοὺς τρόπους μεθιστάναι,
ἀλλὰ καὶ βέβαιον εἶναι τότε μάλιστα τοῖς φίλοις
ἡνίκ' ὠφελεῖν μάλιστα δυνατός ἐστιν εὐτυχῶν.
ταῦτα μέν σε πρῶτ' ἐπῆλθον, ἵνα σε πρῶθ' ὁρῶ κακόν.
ὡς δ' ἐς Αὐλιν ἦλθες αὖθις, χὠ Πανελλήνων στρατὸς
* * * * *
οὐρίας πομπῆς σπανίζων, Δαναΐδαι δ' ἀφιέναι
ναῦς διήγγελλον, μάτην δὲ μὴ πονεῖν ἐν Αὐλίδι,
* * * * *
κἀμὲ παρεκάλεις· τί δράσω; τίνα δὲ πόρον εὕρω πόθεν,
ὥστε μὴ στερέντας ἀρχῆς ἀπολέσαι καλὸν κλέος.

1. State accurately the laws of the metre of the extract, and notice any variations in the readings of the text.

2. (*a.*) Explain the constructions of the accusatives τἀληθές, v. 336; ἄλλους, v. 343; and ταῦτα, v. 349. (*b.*) Explain fully the force of the participles εὐτυχῶν, v. 348; and σπανίζων, v. 352; and state, generally, the distinction between the uses of the participle *with* and *without* the article.

(B.)—Translate into Greek Iambics:—

The quality of mercy is not strained;
It droppeth, as the gentle rain from heaven
Upon the place beneath: it is twice blessed;
It blesseth him that gives, and him that takes:

Appendix D.

Selection of Papers used at the Sessional Examinations.

'Tis mightiest in the mightiest; it becomes
The throned monarch better than his crown;
His sceptre shows the force of temporal power,
The attribute to awe and majesty,
Wherein doth sit the dread and fear of kings;
But mercy is above this sceptr'd sway,
It is enthroned in the hearts of kings;
It is an attribute to God himself;
And earthly power doth then show likest God's
mpers justice.

SHAKESPEARE.

JUNIOR GREEK CLASS.

Translate:—

(A.)—EURIPIDES—*Hippolytus*, vv. 267–283.

ΧΟΡΟΣ. γύναι γεραιά, βασιλίδος πιστὴ τροφὸς
Φαίδρας, ὁρῶ μὲν τάσδε δυστήνους τύχας,
ἄσημα δ' ἡμῖν ἥτις ἐστὶν ἡ νόσος·
σοῦ δ' ἂν πυθέσθαι καὶ κλύειν βουλοίμεθ' ἄν.
ΤΡΟΦΟΣ. οὐκ οἶδ' ἐλέγχουσ' οὐ γὰρ ἐννέπειν θέλει.
ΧΟ. οὐδ' ἥτις ἀρχὴ τῶνδε πημάτων ἔφυ;
ΤΡ. εἰς ταὐτὸν ἥκεις· πάντα γὰρ σιγᾷ τάδε.
ΧΟ. ὡς ἀσθενεῖ τε καὶ κατέξανται δέμας.
ΤΡ. πῶς δ' οὔ, τριταίαν οὖσ' ἄσιτος ἡμέραν;
ΧΟ. πότερον ὑπ' ἄτης ἢ θανεῖν πειρωμένη;
ΤΡ. θανεῖν· ἀσιτεῖ δ' εἰς ἀπόστασιν βίου.
ΧΟ. θαυμαστὸν εἶπας, εἰ τάδ' ἐξαρκεῖ πόσει.
ΤΡ. κρύπτει γὰρ ἥδε πῆμα κοὐ φησιν νοσεῖν.
ΧΟ. ὁ δ' εἰς πρόσωπον οὐ τεκμαίρεταί βλέπων;
ΤΡ. ἔκδημος ὢν γὰρ τῆσδε τυγχάνει χθονός.
ΧΟ. σὺ δ' οὐκ ἀνάγκην προσφέρεις, πειρωμένη
νόσον πυθέσθαι τῆσδε καὶ πλάνον φρενῶν.

1. Write (*a*) the 1st fut. act., perf. act., and 1st aor. pass. of ὁράω. (*b*) the 2nd pers. imperat., the infinitive, and participle of οἶδα. (*c*) Explain fully the formation of *κατέξανται*.

2. Decline together, in the singular, the first two words in the extract.

Translate:—

(B.)—PLATO—*Apology*, c. 18.

Μὴ θορυβεῖτε, ὦ ἄνδρες Ἀθηναῖοι, ἀλλ' ἐμμείνατέ μοι οἷς ἐδεήθην ὑμῶν, μὴ θορυβεῖν ἐφ' οἷς ἂν λέγω, ἀλλ' ἀκούειν· καὶ γάρ, ὡς ἐγὼ οἶμαι, ὀνήσεσθε ἀκούοντες. μέλλω γὰρ οὖν ἄττα ὑμῖν ἐρεῖν καὶ ἄλλα, ἐφ' οἷς ἴσως βοήσεσθε. ἀλλὰ μηδαμῶς ποιεῖτε τοῦτο. εὖ γὰρ ἴστε, ἐὰν ἐμὲ ἀποκτείνητε τοιοῦτον ὄντα, οἷον ἐγὼ λέγω, οὐκ ἐμὲ μείζω βλάψετε ἢ ὑμᾶς αὐτούς. ἐμὲ μὲν γὰρ οὐδὲν ἂν βλάψειεν οὔτε Μέλητος οὔτε Ἄνυτος. οὐδὲ γὰρ ἂν δύναιτο· οὐ γὰρ οἴομαι θεμιτὸν εἶναι ἀμείνονι ἀνδρὶ ὑπὸ χείρονος βλάπτεσθαι. ἀποκτείνειε μέντ' ἂν ἴσως, ἢ ἐξελάσειεν, ἢ ἀτιμάσειεν. ἀλλὰ ταῦτα οὗτος μὲν ἴσως οἴεται καὶ ἄλλος τίς που μεγάλα κακά, ἐγὼ δ' οὐκ οἶμαι, ἀλλὰ πολὺ μᾶλλον ποιεῖν ἃ οὗτος νυνὶ ποιεῖ, ἄνδρα ἀδίκως ἐπιχειρεῖν ἀποκτιννύναι.

1. Parse *fully* (*a*) ἐδεήθην, (*b*) ὀνήσεσθε, (*c*) ἄττα, (*d*) ἐρεῖν, (*e*) ἴστε.

2. Explain *fully* the construction of οἷς ἐδεήθην ὑμῶν in the first sentence of the extract.

(C.)—Translate into Greek:—

1. He said that if you were to do this, you would do him the greatest service.
2. He went away, that he might not see the battle.
3. This boy has black eyes.
4. How much do you think that these dogs would fetch, if offered for sale?
5. When you have managed your own affairs well, you shall manage those of the state also.

JOHN RYALL, *Professor*.

THIRD YEAR'S AND SENIOR LATIN CLASSES.

Translate into elegiac verse:—

Whatever blooms in torrid tracts appear,
Whose bright succession decks the varied year;
Whatever sweets salute the northern sky
With vernal lives, that blossom but to die;
These here disporting own the kindred soil,
Nor ask luxuriance from the planter's toil;
While sea-born gales their gelid wings expand,
To winnow fragrance round the smiling land.

Translate into Latin prose:—

The time present seldom affords sufficient employment to the mind of man. Objects of pain or pleasure, love or admiration, do not lie thick enough together in life to keep the soul in constant action, and supply an immediate exercise to its faculties. In order, therefore, to remedy this defect, that the mind may not want business, but always have material for thinking, she is endowed with certain powers, that can recall what is past, and anticipate what is to come. That wonderful faculty, which we call the memory, is perpetually looking back, when we have nothing present to entertain us.

JUNIOR LATIN CLASS.

Translate:—

LIVY, ii., 23.

Sed et bellum Volscum imminebat, et civitas secum ipsa discors intestino inter patres plebemque flagrabat odio, maxime propter nexos ob aes alienum. Fremebant se foris pro libertate et imperio dimicantes domi a civibus captos et oppressos esse, tutioremque in bello quam in pace, et inter hostes quam inter cives libertatem plebis esse: invidiamque eam sua sponte gliscentem insignis unius calamitas accendit. Magno natu quidam cum omnium malorum suorum insignibus se in forum proiecit. Obsita erat squalore vestis, foedior corporis habitus pallore ac macie perempti. Ad hoc promissa barba et capilli efferaverant speciem oris.

HORACE—*Epistles*, i., 3.

Quid mihi Celsus agit? monitus multumque monendus,
Privatas ut quaerat opes et tangere vitet
Scripta, Palatinus quaecunque recepit Apollo;
Ne, si forte suas repetitum venerit olim
Grex avium plumas, moveat cornicula risum
Furtivis nudata coloribus. Ipse quid audes?
Quae circumvolitas agilis thyma? non tibi parvum
Ingenium, non incultum est nec turpiter hirtum;
Seu linguam caussis acuis seu civica iura
Respondere paras seu condis amabile carmen,
Prima feres hederae victricis praemia. Quodsi
Frigida curarum fomenta relinquere posses,
Quo te coelestis sapientia duceret, ires.

1. Describe the situation of the Janiculum, Tusculum, Prænestc, Baiæ, and Minturnæ.
2. Give some account of the following persons:—Aristippus, Camillus, Chrysippus, and Tibullus.
3. Derive the words *auspicium officium*, *subucula*, *hydropicus*, and *ampullor*.
4. When did Livy flourish? What parts of his history are extant?
5. What engines were used by the Romans in sieges?

Translate into Latin:—

It cannot be denied that Caius has had a prosperous voyage.
I cannot refrain from leaving the city.
No one is so good as not sometimes to sin.
There were some who left the city.
I am not ignorant that Caius has lost the opportunity.

Appendix D.

Selection of Papers used at the Sessional Examinations.

Who is ignorant, that there are three classes of Greeks?

The Germans were with difficulty restrained from hurling their darts against our men.

Translate into Latin elegiacs:—

Again a woman impelled the Trojans to wage fierce wars
In thy kingdom, just Latinus.
Was it not better to serve a hard tyrant,
And to groan in thy bull, cruel Perillus?
Often has it done good to attack enemies buried in sleep,
And to slay the defenceless crowd with armed hand.

Senior Latin Class.

Translate:—

(A).—Juvenal, v., 146–160.

Vilibus ancipites fungi ponentur amicis,
Boletus domino; sed quales Claudius edit
Ante illum uxoris, post quem nil amplius edit.
Virro sibi et reliquis Virronibus illa inbebit
Poma dari, quorum solo pascaris odore;
Qualia perpetuus Phaeacum autumnus habebat,
Credere quae possis subrepta sororibus Afris:
Tu scabie frueris mali, quod in aggere rodit,
Qui tegitur parma et galea metuensque flagelli
Discit ab hirsuta iaculum torquere capella.
Forsitan impensae Virronem parcere credas?
Hoc agit, ut doleas; nam quae comoedia, mimus
Quis melior plorante gula? ergo omnia fiunt,
Si nescis, ut per lacrimas effundere bilem
Cogaris pressoque diu stridere molari.

(B).—Cicero—*De Officiis*, i., 9.

Praetermittendae autem defensionis deserendique officii plures solent esse causae. Nam aut inimicitias aut laborem aut sumptus suscipere nolunt: aut etiam negligentia, pigritia, inertia aut suis studiis quibusdam occupationibusve sic impediuntur, ut eos, quos tutari debeant, desertos esse patiantur. Itaque videndum est ne non satis sit id, quod apud Platonem est in philosophos dictum, quod in veri investigatione versentur quodque ea, quae plerique vehementer expetant, de quibus inter se digladiari soleant, contemnant et pro nihilo putent, propterea iustos esse. Nam alterum iustitiae genus adsequuntur, in inferenda ne cui noceant iniuria, in alterum incidunt: discendi enim studio impediti quos tueri debent deserunt. Itaque eos ne ad rem publicam quidem accessuros putat nisi coactos.

1. Show that Juvenal's date may be approximately ascertained from his writings.
2. Criticise the text of the extract (A).
3. Give an outline of the Seventh Satire.
4. What division of the subject does Cicero make in his treatise *De Officiis*?
5. Name the Greek authors whom he followed in the composition of this work.

Translate into Latin:—

I don't see how past pleasures can assuage present evils. I confess that the judgment of the generality differs from my judgment. Laws punish the wicked, defend and protect the good. The opinion which you are implanting in my mind, Rutilius is rooting up. The opportunity which you are seizing, Gaius has let slip.

Translate into Alcaics:—

O who despises the sacred admonition of places to be reverenced? who, O ancient mother of cities, hath unmoved passed by thee, lying-prostrate, with flying foot?

In vain, excited to madness by the avenging deity, the Persian conqueror hurled hostile destruction against thy walls and roofs set on fire, and

Burst through thy empty courts with barbarian foot: in vain the fierce soldier triumphing overthrew the sanctuaries and images of the gods with unpitying right-hand.

THIRD YEAR'S LATIN CLASS.

Translate:—

LUCRETIUS, ii., 114–128.

Contemplator enim, cum solis lumina cumqu
Inserti fundunt radii per opaca domorum:
Multa minuta modis multis per inane videbis
Corpora misceri, radiorum lumine in ipso,
Et velut aeterno certamine proelia pugnas
Edere turmatim certantia nec dare pausam;
Conciliis et discidiis exercita crebris;
Conicere ut possis ex hoc, primordia rerum
Quale sit in magno iactari semper inani.
Dumtaxat, rerum magnarum parva potest res
Exemplare dare et vestigia notitiai.
Hoc etiam magis haec animum te advertere par est
Corpora quae in solis radiis turbare videntur,
Quod tales turbae motus quoque materiai
Significant clandestinos caecosque subesse.

TACITUS—*Histories*, ii., 35, 36.

Othoniani in ripa turrim struxerant, saxaque et faces iaculabantur. Et erat insula amne medio, in quam gladiatores navibus molientes, Germani nando praelabebantur. Ac forte plures transgressos completis Liburnicis per promptissimos gladiatorum Macer adgreditur. Sed neque ea constantia gladiatoribus ad proelia quae militibus, nec perinde nutantes e navibus quam stabili gradu e ripa vulnera dirigebant. Et cum variis trepidantium inclinationibus mixti remiges propugnatoresque turbarentur, desilire in vada ultro Germani, retentare puppes, scandere foros aut comminus mergere. Quae cuncta in oculis utriusque exercitus quanto laetiora Vitellianis, tanto acrius Othoniani causam auctoremque cladis detestabantur. Et proelium quidem, abruptis quae supererant navibus, fuga diremptum: Macer *ad* exitium poscebatur. Iamque vulneratum eminus lancea strictis gladiis invasorant, cum intercursu tribunorum centurionumque protegitur. Nec multo post Vestricius Spurinna iussu Othonis, relicto Placentiae modico praesidio, cunc ohortibus subvenit. Dein Flavium Sabinum consulem designatum Otho rectorem copiis misit quibus Macer praefuerat, laeto milite ad mutationem ducum, et ducibus ob crebras seditiones tam infestam militiam aspernantibus.

1. Notice some differences between the versification of Lucretius and that of Virgil.
2. Quote or refer to some passages in ancient authors in which the poem of Lucretius is mentioned.
3. Give an account of his atomic theory.
4. What are the archaic forms of *dent*, *cui*, *imperator*, *notitiae*, and *posse*?
5. Trace the course of the Via Flaminia, Via Æmilia, and Via Postumia.
6. Sketch the biographies of Vespasian, Titus, Otho, and Vitellius.
7. Give examples of brevity of style from Tacitus.

B. LEWIS, *Professor.*

HISTORY.

A.—EUROPEAN.

1. Review the state of the Roman Empire in the age of the Antonines.
2. Compare the policy of Augustus with that of Diocletian. What important changes were introduced by the latter?
3. Sketch the character and career of Constantine. What changes did he make in the constitution of the Empire?
4. Narrate the leading events of the Gothic invasion in the time of the Emperor Valens. Describe the settlement of the Goths in Moesia, and the battle of Hadrianople.
5. Inquire whether the laws of the Barbarian states and the Feudal System may be traced to the manners and customs of the ancient Germans.

Appendix D.

Selection of Papers used at the Sessional Examinations.

B.—English.

6. Discuss the consequences of the Norman Conquest of England.
7. In what respects did Anglo-Norman feudalism differ from that of the Continent?
8. What claim had Stephen to the throne of England?
9. Show that Magna Charta contained the leading principles of English liberty.
10. Trace the origin of Parliamentary Government in England.
11. What circumstances led to the Petition of Right? What were the principal provisions of that Act?
12. Review the events of the reign of Charles I. from the attempt to establish episcopacy in Scotland to the commencement of the Civil War.
13. Describe the battles of Marston Moor and Naseby.
14. Narrate the events in Cromwell's career from the Self-denying Ordinance to the execution of Charles I.
15. What was the Act of Uniformity, and when was it passed?

History—(*Honor Course*).

A.—History of England and France.

1. What was the Feudal System? Explain the terms, *Relief*, *Aid*, *Escheat*, *Forfeiture*, *Wardship*, and *Marriage*.
2. Narrate the contest between Henry II. and Thomas à Becket.
3. Sketch the career of Louis IX., with particular reference to the part which he took in the Crusades.
4. Comment upon the manner in which English and French historians treat the battle of Bouvines.
5. Discuss the claim of Edward III. to the throne of France.
6. State the provisions of the Treaty of Bretigni. What difficulties arose in the negotiations consequent upon that treaty?

B.—History of England.

7. What was the Bill of Rights?
8. Describe the battle of the Boyne.
9. Mention the principal victories of Marlborough, with the dates.
10. Enumerate the leading articles in the Act of Union with Scotland. Narrate briefly the rebellions of 1715 and 1745.

English Language.

1. Give some account of the Roman invasion and occupation of Britain. What is understood by the Latin of the First Period?
2. State the facts and dates of the Anglo-Saxon invasion. Whence did the invaders come, and where did they settle?
3. What were the results of the Norman Conquest with regard to the language of the country?
4. Determine the use of French and English in the schools and in the courts of law during the period 1066–1400.
5. What was Layamon's "Brut"?
6. What was the "Ormulum"?

Shakespeare's "Julius Cæsar."

7. Give the date of Cæsar's birth; of his first and second invasions of Britain; of his death.
8. Shakespeare represents Cæsar as having been killed in the Capitol; where was Cæsar actually slain?
9. Explain the diction of the following passages:—

(*a.*) Let not our looks *put on* our purposes.

(*b.*) Cæsar, I never *stood on ceremonies*,
Yet now they fright me.

(*c.*) Casca, be *sudden*, for we fear *prevention*.

(*d.*) And men are flesh and blood, and *apprehensive*.

(*e.*) Here thy hunters stand,
Signed in thy *spoil*, and crimsoned in thy *lethe*.

(*f.*) As rushing out of doors to be *resolved*,
If Brutus so unkindly knocked, or no.

10. Explain the following allusions:—

(*g.*) You all did see, that on the Lupercal
I thrice presented him a kingly crown,
Which he did thrice refuse.

(*h.*) You all do know this mantle; I remember
The first time ever Cæsar put it on;
'Twas on a summer's evening in his tent,
That day he overcame the Nervii.

(*k.*) And in his mantle, muffling up his face,
Even at the base of Pompey's statue,
Which all the while ran blood, great Cæsar fell.

(*l.*) For I can raise no money by vile means;
By Heaven, I had rather coin my heart,
And drop my blood for drachmas, than to wring
From the hard hands of peasants their vile trash,
By any indirection.

(*m.*) The last of all the Romans, fare thee well!

(*n.*) This was the noblest Roman of them all.

English Literature.

1. Sketch the plot of Chaucer's "Canterbury Tales."

2. Explain these passages; remarking any peculiarities of grammatical construction.

(*a.*) To serve halwes couthe in sondry londes.

(*b.*) Of fustian he wered a gipon,
Alle besmotred with his habergeon.

(*c.*) A monke there was a fayre for the maistrie.
Therefore he was a prickasoure a right.

(*d.*) For him was lever han at his beddes hed
A twenty bokes, clothed in black or red,
Of Aristotle and his philosophie,
Than robes riche, or fidel, or sautrie.

3. Comment upon this passage, with reference to the French spoken in England:—

And Frenche she spake ful fayre and fetisly
After the scole of Stratford atte bowe
For Frenche of Paris was to hire unknowe.

4. What was the "Mirror for Magistrates"? Who wrote the Induction?

5. What is the design of Spenser's "Faerie Queene"?

6. Explain the allusions in these extracts:—

(*e.*) By this the northerne wagoner had set
His sevenfold teme behind the stedfast starre
That was in ocean waves yet never wet,
But firme is fixt, and sendeth light from farre
To all that in the wide deepe wandring arre.

(*f.*) Now when the rosy-fingred Morning faire,
Weary of aged Tithones saffron bed,
Had spread her purple robe through deawy aire,
And the high hils Titan discovered;
The royall Virgin shooke off drousyhed.

(*g.*) Her angel's face,
As the great eye of heaven, shyned bright,
And made a sunshine in the shady place;
Did never mortal eye behold such heavenly grace.

7. Compare the dramatic influence of Shakespeare and Ben Jonson.

8. Sketch the dramatic career of Beaumont and Fletcher, with some account of their works.

Appendix D. — Selection of Papers used at the Sessional Examinations.

9. What is the design of Shakespeare's "Hamlet"? Review, briefly, the criticisms of Goethe, Schlegel, and Coleridge.

10. Explain the diction of these passages:—

(*k.*) So loving to my mother,
That he might not *beteem* the winds of heaven
Visit her face too roughly.

(*l.*) Perhaps, he loves you now;
And now no *soil*, nor *cautel*, doth *besmirch*
The virtue of his will.

(*m.*) They clepe us drunkards, and with swinish phrase
Soil our *addition*.

(*n.*) The dram of *eale*
Doth all the noble substance *of a doubt*
To *his* own scandal.

(*p.*) Unhouseled, disappointed, unaneled.

11. Characterize the prose style of Hooker, Bacon, Sir Thomas Browne, and Jeremy Taylor respectively.

12. Trace the correct school of poetry from Denham to Pope.

13. What is the design of Milton's "L'Allegro" and "Il Penseroso"?

14. Enumerate Dryden's controversial and satirical poems.

15. Write a life of Pope.

16. Mention those English poets who have been remarkable for excellence in prose composition.

Early English—Special Prize.

1. Translate these passages from Ælfred's Translation of Orosius:—

(*a.*) Þa fór he þa-gyt norð-ryhte swa he mihte on þæm oðrum þrim dagum geseglian; þa beah þæt land þær easte-ryhte, oðde sio sæ in on þæt land, he nyste hwæþer; buton he wiste þæt he þær bád westan windes, oðde hwón norðan, and seglede þanon east be lande swa swa he mihte on feower dagum geseglian; þa sceolde he þær bidan ryhte norðan windes, forðan þæt land þær beah suð-rihte, oðde seo sæ in on þæt land, he nyste hwæþer.

(*b.*) Swiðost he fór ðyder, to eacan þæs landes sceawunge, for þæm horshwælum for þæm hi habbad swyðe æðele bán on hyra toðum. Þa ted hy brohton sume þæm cyninege; and hyra hýd bið swiðe gód to scip-rápum. Se hwæl bið micle læsse þonne oðre hwalas, ne bið he lengra þonne syfan elna lang. Ac on his ágnum lande is se betsta hwæl-huntað; þa beoð eahta and feorwertiges elna lange, and þa mæstan fiftiges elna lange; þara hé sæde þæt he syxa sum ofsloge syxtig on twám dagum. He wæs swiðe spedig man on þæm æhtum þe heora speda on beoð, þæt is on wildeorum [MS. wildrum]: he hæfde þa-gyt, þa he þone cyning sohte, tamra deora unbebohtra syx hund. Da deor hi hatað hránas, þara wæron syx stæl-hránas; þa beod swyðe dyre mid Finnum, forþæm hy fod þa wildan hránas mid.

(*c.*) And þær is mid Estum deaw þonne þær bið man dead, þæt he lið inne unforbærned, mid his magum and freondum, monað, gehwilum twegen; and þa kyninga and þa oðre heahðungene men swa micle lencg swa hi maran speda habbað, hwilum healf geár þæt hi beoð unforbærned, and liegað buðan eordan on hyra husum. And ealle þa hwile þe þæt lic bið inne, þær sceal beon gedryne and plega, oð done dæg þe hi hine forbærnað.

2. Parse these words: *fór*, *mihte*, *beah*, *wiste*, *swiðost*, *toðum*, *brohton*.

3. Explain the phrases:—

(*a*) he nyste hwæþer.
(*b*) syxa sum.
(*c*) þe heora speda on beoð.

4. Analyse the following words:—*hors-hwælum*, *hwæl-huntað*, *stæl-hránas*, *unforbærned*, *heahðungene*.

5. Inquire whether modern English is a mixed language in Grammar as well as in Vocabulary.

6. Compare the relative proportion of French derivatives in Piers Ploughman and in Chaucer.

7. Explain the structure of Alliterative Verse.

8. Discuss those passages in Robert of Gloucester and Robert of Brunne, which bear upon the history of the English Language.

WILLIAM RUSHTON, *Professor.*

MODERN LANGUAGES.

Translate into French:—

I.

Of the animals who live with man many things are worthy of being known, and the dog and the horse are those which are most faithful. We read that a dog fought against robbers to save his master, and, although pierced with wounds, would not leave the dead body, and prevented the birds and the wild beasts from touching it. Another dog in Epirus recognised the murderer of his master in the midst of an assemblage of people, and forced him to confess his crime by biting and barking at him. Volcatius, a noble Roman, returning in the evening from the country, was attacked by a robber, and was saved by his dog. The Senator Coelius, also, while lying sick at Placentia, was attacked by armed men, and was not wounded until they had killed his dog.

PLINY—*Natural History.*

II.

The king (Frederick the Great of Prussia) now approached the end of his life, but his increasing infirmity did not prevent him from attending, with his usual diligence, to affairs of state. Before five o'clock in the morning he constantly gave audience to one of his secretaries and dictated letters on foreign concerns. Another secretary then entered, with whom he adjusted points of internal government. With a third minister he discussed military arrangements.

On one of these occasions the secretary fell dead at his feet in presenting a paper to him. The king, thus reminded of his own fate, did not seem shocked at the accident, but coolly ordered the body to be removed, sent for another secretary, and continued his labours.

When he had been thus employed for three hours, and had even answered letters received from the meanest of his subjects, he used to give instructions to the commandant of Potsdam and other officers. His health was the next object of consideration; and although he had no high opinion of medical aid, he daily consulted some eminent professors of the healing art. He then conversed with select friends in an easy and familiar manner. He dined alone; and after signing the letters and other papers which he dictated in the morning, re-enjoyed the pleasure of society. Before he retired to rest, the works of the ancients were read to him.

Such were his daily occupations during his last illness, even to the day which immediately preceded his death. While the tomb seemed ready to open for his feeble body, the strength and activity of his mind embraced every useful object, and allowed him still to perform the duties of a king.

RUSSELL—*Modern Europe.*

1. When is a noun preceded by the definite article in French, while it is not in English?

2. State the use of the imperfect and of the preterite in French, comparing it to the Latin, and illustrate it by examples.

3. Give the rules of the French grammar on the past participle, with examples.

4. What was the state of French literature at the death of Louis XIV.?

5. State what you know of the character and influence of Lafontaine's fables.

6. Characterize the genius of Molière; say which are considered his best plays.

7. Compare Molière's "Misanthrope" with the same subject treated by ancient and modern authors, and especially Shakespeare.

8. Characterize the genius of Racine; compare his "Phèdre" with the same subject treated by Euripides.

9. What are the earliest lasting monuments of the history of French literature?

10. What was the most brilliant epoch of French literature?

R. DE VERICOUR, *Professor.*

Appendix D.

Selection of Papers used at the Sessional Examinations.

Logic.

1. What defect is incident to the second operation of the mind? How far and by what processes does Logic remedy it?

2. What are Relative Nouns? What arguments can be based upon the connexion between them?

3. What is the distinction between Differentia and Proprium, and between Generic and Specific Differentia?

4. In what sorts of terms do Extension and Comprehension respectively reach their highest point, and why?

5. How does Accidental differ from Logical Definition?

6. How many kinds of Inference are there in Deductive Logic?

7. Why does Thompson limit Contradictory Opposition to E and I? Is he right in so doing?

8. What is his account of Subaltern Opposition?

9. Explain the various modes of Conversion.

10. Show that if one of the premises be negative the conclusion must be negative.

11. Special rules for the third figure, with proofs.

12. Construct a valid syllogism, by the help of Sir W. Hamilton's new kinds of propositions, which violates the special rules for the second figure, and reduce it to one of the ordinary modes.

13. What are Mill's objections to Induction by Points of Reasoning?

14. Give the canon of the Conjoint Method of Agreement and Difference. How far does it remedy the inherent weakness of the Method of Agreement?

15. What is meant by the Composition of Causes?

16. What is the distinction (if any) between cause and condition?

17. What are fallacies of Generalization? Give instances.

18. Define Dilemma. To what defects is it liable?

Metaphysics.

1. In what sense is Metaphysics to be regarded as an Inductive Science?

2. Explain the doctrine of Occasional Causes. How far was it the necessary result of the philosophy of Des Cartes?

3. Explain Hobbes' account of memory, and compare it with that of Sir W. Hamilton.

4. Is there any difficulty in proving the existence of other finite minds upon the principles of Berkeley?

5. Is Locke's system essentially sensational?

6. Was Locke's method faulty because he commenced with an inquiry into the *origin* of our ideas?

7. To what extent are Hume's principles borrowed from previous philosophical systems?

8. Examine his arguments to prove that the idea of cause and effect is not *à priori*.

9. How does Kant show that Space and Time are *à priori*?

10. Criticise Reid's account of the First Principles of Contingent Truths.

11. Is Sir W. Hamilton's theory of latent mental modifications reconcilable with the appeal to consciousness as explained by himself?

12. How far is Mill's Psychological Theory adequate to explain the Ego?

G. S. Read, *Professor.*

Mathematics.—First Year's Students.

1. If K be any point in the side BC of the parallelogram ABCD, show that the sum of the areas of the triangles ABK, KCD, is constant.

2. Mention the most important properties of circles proved in the Third Book of Euclid.

3. If two straight lines intersect in a circle, the rectangles under the segments are equal?

4. Inscribe a pentagon in a given circle. Show that any regular polygon, the number of whose sides is given by $2^m 3.5$, can be inscribed in a circle by Euclid's method.

5. Define proportion geometrically, and show clearly from your definition that the areas and bases of triangles of the same altitude are proportional.

6. Divide $x^{2n}-y^{2n}$ by x^2-y^2. Multiply the quotient by $x+y$, and show that the result is equal to

$$(x^n+y^n)\ (x^{n-1}+x^{n-2}y+x^{n-3}y^2+\ \ldots\ +xy^{n-2}+y^{n-1})$$

7. Find the G.C.M. of 684 and 190, and the L.C.M.

Also find the G.C.M. of $x^4+6x^2-5x^3-4+2x$ and x^6-17x^3+16.

And the L.C.M. of $(x^2-4)^2\ (x-1)^3\ (2x+4)$ and $(x+2)^3\ (x-2)\ (2x-2)^2$.

8. What is the present value of a bill for £300, due six months hence, money being worth five per cent.?

9. Show that a quadratic equation has but two roots; and find the condition that $x^2+px+q=0$ may have one root positive and real and the other negative.

Solve the equations (1) $x^2-2x-3=0$.

(2) $(x-1)\ (x-2)\ (x-3)+1.2.3=0$.

(3) $x^{2n}+cx^n+b=0$.

10. Prove that $x^m \times x^n = x^{m+n}$ when m and n are positive integers.

How do you deduce that $x^{-m}=\frac{1}{x^m}$ and $x^{\frac{m}{n}}=\sqrt[n]{x^m}$?

Find the square root of $x^{-2}y^{\frac{2}{3}}z^{\frac{1}{2}}+2+x^2y^{-\frac{2}{3}}z^{-\frac{1}{2}}$.

11. If $a:b::c:d$, prove that $abcd$ is equal to the square of bc and

$$a^3-3a^2b+b^3:(a-b)^3::c^3-3c^2d+d^3:(c-d)^3.$$

12. Explain clearly what is meant by the circular measure of an angle,

A water-wheel, whose diameter is twelve feet, makes three revolutions per minute; find approximately the number of miles travelled per hour by a point on the circumference of the wheel.

13. Find an expression for all the angles having the same sine as α. Solve the equations, $\sin 2\theta=\sin\theta$ . . . . . (1).

$$\tan\theta+\tan 2\theta=1-\tan\theta\tan 2\theta \ \ldots\ (2).$$

14. Prove that sin (A—B)=sin A cos B—cos A sin B, when A is an angle in the fourth quadrant, B an angle in the third quadrant, and (A—B) an angle in the first quadrant.

Show that $\dfrac{\sin 2\theta+\sin 3\theta}{\sin\theta+\sin 4\theta}=\dfrac{\cos\frac{\theta}{2}}{\cos\frac{3\theta}{2}}$.

15. If A, B, C be the angles of a triangle, prove that

$$\sin A+\sin B+\sin C=4\cos\frac{A}{2}\cos\frac{B}{2}\cos\frac{C}{2}$$

16. In any triangle prove that $c=a\cos B+b\cos A$. Show how to solve a triangle when two sides and the included angle are given.

SECOND YEAR'S STUDENTS.

(*Prize Paper.*)

1. ABC is an isosceles triangle; PA+PB+PC is a minimum when P is at the centre of the circumscribing circle. Prove this both by geometry, and by the differential calculus. Hence deduce, that if a regular polygon, ABC . . . . . of an odd number of sides be inscribed in a circle, the sum of PA+PB+PC+ . . . . . is least when P is centre of the circle.

2. Through a given point in a circle show how to draw, when possible, a chord so that the segments may be in a given ratio.

3. A man walks on a level plane so that two very distant towers on the same plane at A and B always appear equally high. He starts from a point C, lying between A and B, and in the line AB, where AC=a miles, and BC=b miles and $a>b$; show that when he again crosses the line AB he will have walked $\frac{\pi ab}{a-b}$ miles.

4. Sum the series—

(1) $\frac{2.3}{1}+\frac{3.4}{2}+\frac{4.5}{3}+$&c. to n terms.

Appendix D. — Selection of Papers used at the Sessional Examinations.

(2) $2^n - n.2^{n-2} + \frac{n(n-3)}{1.2} . 2^{n-4} - \frac{n(n-4)(n-5)}{\underline{|3}} . 2^{n-6} + \ldots$

(3) $\tan^{-1}\frac{1}{1+x+x^2} + \tan^{-1}\frac{1}{1+3x+x^2} + \tan^{-1}\frac{1}{1+5x+x^2}$ +&c. to n terms.

5. If a_1, a_2, a_3 be the roots of the equation $x^3+px^2+qx+r=0$, find the equation whose roots b_1, b_2, b_3 are given by

$$b_1=\frac{a_1}{a_2}+\frac{a_1}{a_3},\quad b_2=\frac{a_2}{a_1}+\frac{a_2}{a_3},\quad b_3=\frac{a_3}{a_1}+\frac{a_3}{a_2}$$

6. Show that the three radical axes of three circles intersect in a point. Find the condition that the radical axes of the circles

$$a(x^2+y^2)+bx+cy=0.$$
$$a'(x^2+y^2)+b'x+c'y=0.$$
$$a''(x^2+y^2)+b''x+c''y=0.$$

may be identical.

7. Find the equation to the ellipse referred to two conjugate diameters as axes. The tangent at a fixed point, P, of an ellipse is cut by two conjugate diameters in M and N; prove that the rectangle MP PN is constant.

8. Mention and illustrate with a figure the ordinary properties of a parabola. A focal chord to a parabola is bisected in V, and a line perpendicular to it through V meets the axis in G. Show that SG is half the length of the chord.

9. How would you define poles and polars with reference to any conic section? Mention all the properties you know them to possess.

10. Find the equation to the circumscribing circle of a triangle ABC in the form $\frac{a}{\alpha}+\frac{b}{\beta}+\frac{c}{\gamma}=0$.

Through A, the chord AP is drawn. Show that the lines BP, CP are given by the equations

$$\frac{a}{\alpha}+\frac{k\gamma}{b+kc}=0,$$
$$\frac{a}{\alpha}+\frac{\beta}{b+kc}=0,$$

when $B-k\gamma=0$, is the equation to AP.

11. Define a limit, and show that the limit of $\left(1+\frac{1}{x}\right)^x$ when x is indefinitely increased, lies between 2 and 3.

Find the limit of $\left(\frac{1-\cos\theta}{1-\cos 2\theta}\right) . \sqrt[\theta]{1+2\theta}$ when θ is indefinitely increased.

12. Under what conditions is the following necessarily true? viz. :—

$$\frac{F(x+h)-F(x)}{\phi(x+h)-\phi(x)}=\frac{F'(x+\theta h)}{\phi'(x+\theta h)}.$$

Assuming the truth of this, prove Taylor's theorem.

In the expansion of $(\cos x)^{\sin x}$ in ascending powers of x, show that if a_n be the coefficient of x^n, then $a_0.a_{2n}-a_1.a_{2n-1}+a_2.a_{2n-2}$—&c. $+\frac{1}{2}(-1)^n a_n^2=0$. Determine the values of a_0, a_1, a_2.

13. Show how to find the maxima and minima values of a function of of two independent variables. Find the maxima and minima values of x^2+y^2 where x and y are subject to the condition $\lambda x^2 \times \mu y^2=1$, distinguishing the maximum from the minimum.

14. Find the condition that the curve $y=\phi(x)$ may have n consecutive points in a straight line, and show that if n be odd the branches of the curve contiguous to these points lie on opposite sides of the line, but if n be even, on the same side.

15. Show that $\tan\phi=r\frac{d\theta}{dr}$ and $\frac{1}{p^2}=u^2+\left(\frac{du}{d\theta}\right)$. Find the equation to the equiangular spiral $p=r\sin\alpha$ in rectangular co-ordinates. Show that the evolute of an equiangular spiral is a similar curve.

16. Integrate $\frac{1}{(a^2+x^2)^{\frac{n}{2}}}$, $\frac{1}{\sqrt{a-bx+cx^2}}$, $x\sqrt{\frac{a+x}{a-x}}$, $\frac{1}{\sqrt{1+a^x}}$, and make $\int x^{m-1}(a+bx^n)^p\,dx$ depend on $\int x^{m+n-1}.(a+bx^n)^p\,dx$ by a formula of reduction.

17. Give the general formula for finding the volume of a solid of revolution in polar co-ordinates.

Find by integration the volume included between a right cone circumscribing a sphere and the sphere, the angle of the cone and radius of sphere being given.

18. Differentiate the function $\int_a^b \phi(c, x).\,dx$ with respect to m, a, b, and c being functions of m.

Find form of $\phi(x)$ so that $\int_0^c \phi(x)\{c^n+x^n\}\,dx$ may be independent of C.

19. In a spherical triangle prove that

$$\tan\tfrac{1}{2}(A-B)=\frac{\sin\frac{1}{2}(a-b)}{\sin\frac{1}{2}(a+b)}\cot\frac{C}{2}.$$

If $b\ \ c=\pi$, prove that sin 2B sin 2C=0.

20. Find the area of a spherical triangle.

If $a=b$ and $c=\frac{\pi}{2}$, show that $\tan e=\frac{\sin^2 a}{2\cos a}$.

(Pass Paper.)

1. Show how to find the numerical value of π, and calculate it to five places of decimals.

2. Prove that e is incommensurable.

3. Find the equation to a straight line in the form $x\cos\alpha+y\sin\alpha=p$.

4. Interpret the following:—

$$x^2+y^2=0;\ x^2-y^2=0;\ a\theta+b\theta^2=c.$$

5. Find the equation of the tangent to the circle

$$x^2+y^2+ax+by=0.$$

at any point. What is the condition necessary that the axis of x may be a tangent at the origin?

6. Define a parabola, and find its equation in the form $y^2=4ax$.

Tangents at the extremity of a focal chord intersect at right angles in the directrix. Prove this.

7. In the hyperbola, prove that the difference of the squares on conjugate diameters is constant.

8. Define a differential coefficient, and *from your definition* prove that $\frac{d\sin x}{dx}=\cos x$. Differentiate $\varepsilon^{\cos x}$, $\tan^{-1}(e^{ax})$, $(1-x^2)\sqrt{1-x^2}$.

9. Prove Leibnitz's theorem, viz:—

$\frac{d^n(yz)}{dx^n}=\frac{d^ny}{dx^n}.z+n\frac{d^{n-1}y}{dx^{n-1}}.\frac{dz}{dx}+$ &c., where y and z are functions of x. If $3x^2\frac{d^2y}{dx^2}-\frac{dy}{dx}=0$, show that $\frac{d^{n+2}y}{dx^{n+2}}=\frac{1-6nx}{3x^2}.\frac{dy^{n+1}}{dx^{n+1}}-\frac{n(n-1)}{x^2}\frac{d^ny}{dx^n}$.

10. Show how to find the maxima and minima values of $\phi(x)$. If ABC be an equilateral triangle, find the position of P, so that the sum of PA, PB, PC may be a minimum.

11. Under what conditions is the following necessarily true?

$$\frac{F(x+h)-F(x)}{f(x+h)-f(x)}=\frac{F'(x+\theta h)}{f'(x+\theta h)}$$

Assuming this, prove Taylor's theorem.

Appendix D.

Selection of Papers used at the Sessional Examinations.

12. Expand $\cos(1-x^2)$ and $\tan^{-1} x^2$ in ascending powers of x. Can $a^{\frac{1}{x}}$ be expanded in ascending powers of x? If not, why not?

13. Find the equation to the tangent to the curve $y=\cos\frac{\pi}{2}\epsilon^x$ at the origin. What is an asymptote to a curve?

14. Integrate $\cos n x$, $\frac{1}{\sqrt{1-x^2}}$ $\frac{1}{a\cos x+b\sin x}$, and find the whole area of the curve $a(x^2+y^2)+bx=c$ by the integral calculus.

ROBERT ROMER, M.A., *Professor.*

MIXED MATHEMATICS.

1. Prove the rule for the composition of couples in the same plane.

2. Four spheres, each eight inches in diameter, form a pyramid on a horizontal floor; find the distance of its centre of gravity from the floor.

3. A cubical box is half filled with water, and placed upon a rough inclined plane, so as to have the edges of its base parallel to those of the plane; if the plane be slowly inclined, find whether it will slide or topple over.

4. A body is projected in vacuo with a velocity of 50 feet per second, at an elevation of 15°; find its range, greatest altitude, and time of flight.

5. A weight of 8 ozs., hanging vertically, draws a weight of 12 ozs. by means of a string, along a smooth horizontal plane; find the space described by either body in the third second, also the tension of the string.

6. Two equal balls are suspended by equal and parallel strings, so as to rest in contact—one is drawn aside through an arc, whose chord is a, and allowed to fall and drive the other through an arc, whose chord is b; find the co-efficient of elasticity.

7. If the planets moved in concentric circular orbits round the sun, with forces varying inversely as square of the distances, prove the truth of Kepler's second and third laws.

8. A pencil of parallel rays falls on a convex spherical surface, bounding a dense medium; find the focus of the refracted pencil.

9. A ray of light enters a sphere, and emerges after two internal reflexions; find the condition of minimum dispersion.

10. Given the sun's meridian altitude and his midnight depression below the horizon; find the latitude of the place, and the sun's declination.

11. Find the lowest latitude at which twilight lasts all night.

12. From the observed right ascension and declination of a celestial object, *calculate* its latitude and longitude.

Prize Questions.

1. Weights W and n W, connected by a fine string move on two inclined planes, whose inclinations are a and a'; find the motion of the centre of gravity.

2. Find the centre of gravity of the area enclosed by the curve $r = a(1 + \cos\theta)$.

3. Find the general equations of equilibrium of a flexible string acted on by any forces.

4. A particle is placed in a thin rectilinear tube, and is acted on by a force tending towards a fixed centre, and varying directly as the distance; find the time of an oscillation.

5. A particle is acted on by a central force, which varies inversely as the seventh power of the distance, and is projected from an apse with a velocity which is to the velocity in a circle at the same distance as $1:\sqrt{3}$; find the equation of curve described.

6. A semicular area is just immersed in a fluid, its diameter being horizontal; the density of the fluid varies as the depth; determine the centre of pressure.

7. A heavy body is let fall from a height (h), when it reaches the ground; prove that it is deviated towards the east, and find the amount of the deviation.

8. Prove that the equation of time vanishes four times a year.

9. Find how much the time of sunrise is advanced by refraction.

10. What is about the distance of a star whose annual parallax is 2"?

Practical Mechanics.

1. The length of the barrel of a gun is c feet; a ball weighing m pounds leaves the muzzle with a velocity of v feet per second; find the mean pressure of the elastic vapour on the ball.

2. A body is projected with a given velocity v in a medium whose resistance varies as the square of the velocity; determine the distance through which it will move before being brought to rest—1st, if acted on by another force; 2nd, when also acted on by a constant force f.

3. The thread of the screw of a vice makes 4 turns to the inch; the handle is 6 inches long, and is urged by a pressure of 100 lbs.; find the pressure necessary to extract a piece of iron from the vice if the co-efficient of friction $= \cdot 5$.

4. In an ordinary roof how would you calculate the strain on a tie-beam connecting the rafters—1st, when it joins their lower ends; 2nd, when connecting any other points in them?

5. A cylinder weighing 100 lbs. turns upon a horizontal axis; motion is communicated by a weight of 10 lbs. attached to a string, which is coiled round the surface of the cylinder; find the space through which the weight will descend in 10 seconds.

6. In what time would a steam-engine of 15 effective horse-power empty a shaft full of water, the diameter of the shaft being 8 feet, and 200 fathoms deep?

7. How many units of heat are necessary to evaporate 10 cubic feet of water at 62° Fahr. into steam, having the temperature of 250° Fahr.?

8. Prove the following formula for the horse-power of an engine, viz. $\text{h.p.} = \frac{144\, r \epsilon \mu p\, S}{33000}$.

9. Show that the maximum useful effect is when P is a maximum.

10. How would you calculate the quantity of water necessary to condense a given quantity of steam?

Natural Philosophy.

Junior Division.

1. A straight lever, 4 feet long, has its shorter arm 1 foot 4 inches in length; what weight at the extremity of the shorter arm will balance 15 lbs. at the end of the longer—1st, neglecting the weight of the lever; 2nd, suppose it to weigh 6 lbs.?

2. What is meant by the moment of a force with regard to a point? and prove in the case of two parallel forces that their moments with regard to any point in their resultant are equal and opposite.

3. What is meant by the dynamical measure of a force, and illustrate your meaning by the example of gravity?

4. Two bodies are projected vertically upward with equal *forces*; one of them is twice the weight of the other; compare the heights to which they will ascend.

5. State the conditions of equilibrium of a solid body floating in a fluid.

6. What do you mean by the principal focus of a lens; how may it be experimentally determined?

7. When the eye is directed to an object, an inverted image of that object is formed on the retina; illustrate this by means of a figure.

8. What is meant by saying that the co-efficient of expansion of air is $\frac{1}{459}$? Describe some method by which this quantity can be determined.

9. How would you determine the magnetic axis of a bar magnet?

10. What limits are there to the charge of a Leyden jar?

11. Enumerate the chief sources of electricity.

12. What is the use of employing an astatic needle in the galvanometer?

Senior Division.

1. Explain what is meant by the parallelogram of forces, and deduce from it the condition of equilibrium of three forces acting on the same point.

2. A regular hexagon is divided into two equal parts by a diagonal; determine the centre of gravity of either part.

3. From the principle that the *work done* by the moving power is equal to the *work done* by the resistance, deduce the condition of equilibrium in the screw.

Appendix D.

Selection of Papers used at the Sessional Examinations.

4. A plane which rises 1 foot in 10 is 100 yards in length; with what velocity should a body commence moving up it, so as to just reach the top?

5. A body is projected vertically upward with a given velocity; how would you determine the time at which it would reach a given altitude? Why does the question in general admit of two solutions?

6. A body moves in a circle of 50 yards radius with a velocity of 40 feet per second; calculate the centrifugal force. Explain the meaning of the result.

7. A plane surface is immersed in a fluid; what is meant by the *centre of pressure*; why is this point lower than the centre of gravity of the surface?

8. Describe the compound microscope.

9. Deduce the formula which connects the conjugate foci of a lens with its focal length.

10. From knowing the sun's meridian altitude and declination, find the latitude of the place of observation.

11. State in general the difference between the appearances of a superior and an inferior planet, both as regards their phases and apparent motions.

12. What is meant by the precession of the equinoxes?

Prize Questions.

1. A uniform rod rests with its extremities on two props; find at what point of its length a weight equal to its own weight must be suspended, in order that the pressures on the props should be as 2 : 1.

2. A bent lever consists of two uniform heavy rods, whose lengths are as 1 : 2; find the weight that must be attached to the shorter, in order that the arms may make equal angles with the horizon.

3. Three tacks are driven into a vertical wall, so as to form an equilateral triangle with its base horizontal; a string hangs over them, to each end of which a weight W is attached; find the pressure on each.

4. Find the relation between a very small increase of the length of a simple pendulum, and the corresponding decrease of the number of oscillations in a given time.

5. Two balls are projected vertically upwards from the same point with the same velocity v, the second being projected at the instant when the first attains $\frac{3}{4}$ of its greatest altitude; find the height at which they will meet.

6. Two *non-elastic* spheres moving in the same straight line impinge; find the velocity after impact.

7. Describe the method of determining the refractive index of any transparent substance.

8. Explain the method of determining *time* by an altitude of the sun.

9. In an eclipse of the moon, which does the obscuration commence on its eastern or western limb. In an eclipse of the sun does the shadow of the moon move eastward or westward on the earth's surface.

10. A star whose declination is known rises at the north-east point of the horizon; find the latitude of the place.

SENIOR DIVISION.

1. Describe some method of determining the expansion of mercury, that of the solid envelope in which it is contained being unknown.

2. State the laws of the formation of vapour in a space not occupied by air.

3. Describe Daniell's hygrometer, and state its defects.

4. What is meant by the "mobile equilibrium of temperature"?

5. How is the velocity of sound altered by the temperature of the air?

6. What is meant by the latent heat of steam? How is it measured?

7. What is meant by the *dip* of the magnetic needle? Give an outline of the law according to which it varies on moving north or south on the same meridian.

8. What are the conditions necessary for the development of thermo-currents?

9. State the law of induction of one current by another.

10. What is the cause of the residual charge in the Leyden jar?

11. Describe Smee's battery, and point out the direction of the current.

12. Describe Cuthbertson's balance electrometer.

Prize Questions.

1. The specific heat of a gas at a constant pressure differs from its specific heat at a constant volume. What is the physical cause of the difference?

2. In a charged Leyden jar there is always an excess of electricity on that coating which has been connected with the machine. Why is this the case? And explain the relation which subsists between the excess and the total charge.

3. How is it proved by Coulomb's balance that magnetic attractions and repulsations vary inversely as the square of the distance?

4. Explain exactly the action of a current on the pole of a magnetic needle, and describe some experiments exemplifying it.

5. A circular current is suspended so as to move freely on a vertical axis. What action does the earth exert on it?

6. In the analysis of solar heat it is necessary to use a prism of rock salt. Why so?

7. Two thermometers, the bulk of one of which is blackened—that of the other covered with metallic leaf—are held at equal distances from the same source of heat. Describe the effects produced on each.

8. Describe Regnault's hygrometer. What advantages does it possess as compared with Daniell's?

PHYSICS.—THIRD YEAR'S STUDENTS.

1. State the sources of inaccuracy in Dulong and Petit's method of determining the expansion of mercury. How did Regnault modify this method?

2. If a vertical rod be fixed at one end, and extended by means of a force applied to the other, both its length and volume are altered; describe some experiments by which these alterations can be compared.

3. From knowing the capacity for heat of a gas at a constant pressure, and also its capacity in a constant volume, deduce the mechanical equivalent of heat.

4. Explain the principle of the Bifilar manetometer and its use.

5. How would you distinguish a plane from a circularly polarized ray?

6. How did Newton account for the colours of thin plates?

7. Prove, on the undulatory theory, that the index of refraction is the ratio of the velocities of light in the two media.

8. A current of electricity passes in succession through several conductors; by what means could you calculate the intensity from knowing the electromotive force and the resistance of each portion.

9. If a current pass simultaneously through several conductors, how would you calculate the intensity in each portion?

JOHN ENGLAND, *Professor.*

CHEMISTRY.—SPECIAL AND PRIZE EXAMINATION.

Pass Questions.

N.B.—The name and faculty of each student must be written on the first page of each book.

1. When chlorine is passed through a solution of ammonia in water, what gas is produced? Give its properties.

2. Give examples by formulæ of oxacids and hydracids.

3. What are monobasic and polybasic acids? Give examples.

4. What is meant by combination by weight and by volume? Illustrate both modes of combination in the case of ammonia.

5. How are carbonic acid and carbonic oxide converted into each other? Give the composition and the properties of each. State how carbonic acid, when present in considerable quantity in air, is detected.

6. Hydrogen gas is passed over sesquioxide of iron, heated to redness, and the vapours produced are then conducted through another tube filled with metallic iron, heated also to redness; explain the reaction in each case.

7. What is a salt? Give examples of haloid and oxysalts and of double salts.

8. Give an example of catalytic action.

9. Explain the law of isomorphism. Give examples of isomorphous salts.

10. What is the effect of nascent hydrogen on a solution of arsenious acid?

11. How is caustic potash prepared? Give the best test for this substance when in solution.

12. What are the general properties of the oxides of the metals of the alkalies and of the alkaline earths? How are the former separated from the latter in analysis?

13. How is nitrogen in organic substances estimated by conversion into ammonia?

Appendix D.

Selection of Papers used at the Sessional Examinations.

14. What is meant by the water type in the classification of chemical compounds? Write the formula of caustic potash (anhydrous) on the water type.

15. Explain the principles on which is based the estimation of C and H in organic substances.

Prize Questions.

N.B.—Prizemen are not required to answer the Pass Questions.

1. What is the difference between an empirical and a rational formula? Illustrate by examples.

2. How is nitric anhydride prepared? Give the general formulæ of the anhydrides.

3. Explain the doctrine of equivalents. Calculate how much hydrated nitric acid is required to decompose 100 grains of anhydrous carbonate of soda.

N=14.
Na=23.

4. A mixture of fluor spar silica and strong sulphuric acid are heated together, and the product passed into water; give the different reactions.

5. What is meant by the atomicity of the elements? Give examples of monatomic, diatomic, triatomic, and tetratomic elements, in combination and replacing each other.

6. How is carbonate of lead prepared as a pigment?

7. If iron, copper, and silver be in the same solution, how would you separate them? Give the best test for each.

8. Explain the American mode of extracting silver from its ores.

9. Twenty grains of the silver salt of an organic acid give on combustion 12·934 grains of metallic silver; what is the equivalent of the hydrated acid?

Ag=108.

10. What are homologous and heterologous series? Mention some of the compounds belonging to the latter series, and derived from ethylic alcohol. Give their formulæ according to the types on which they are formed.

11. What is the meaning of the condensed water type? Write the formula of sulphuric acid upon such a type.

12. How is common ether prepared? Give the theory of its formation, and write the formulæ of alcohol and ether on the water type.

J. Blyth, *Professor.*

Geology and Mineralogy.

1. What are the causes at the present time modifying the earth's crust, and what are their results?

2. What are the features which mark sedimentary rocks, and into what lithological groups are these rocks divided?

3. What is the nature and composition of Doleritic rocks?

4. Under what circumstances do Metamorphic rocks occur, and what is the nature and composition of those rocks?

5. Name some of the fossils found in the lowest portion of the Silurian rocks.

6. What is the position of the Upper Llandovery rocks, and what fossils characterize their strata?

7. In what formation in the British Isles does rock-salt occur, and what are the strata usually associated with it?

8. What products of commercial value are obtained from the Lias?

9. What are the members of the Eocene deposits of the valley of the Thames which are absent from the Paris basin?

10. What are the circumstances which have induced geologists to infer that an Arctic climate prevailed during the Pleistocene epoch?

11. Describe the external characters of Calc-spar.

12. By what simple means can Iron pyrites and Copper pyrites be distinguished from each other?

13. What are the characters which distinguish Talc from Mica?

14. In what rocks is Hornblend usually a constituent mineral?

Robert Harkness, *Professor.*

Zoology and Botany.

1. What vertebrate animals are without limbs?
2. What vertebrate animals are without teeth?
3. What hoofed mammals are peculiar to southern and tropical America?
4. Indicate, as succinctly as possible, the most general characters of the class Crustacea.
5. Compare the Nudibranchiata of Cuvier with (*a*) Heteropoda and (*b*) ordinary Gasteropoda.

6. Mention some apetalous plants not usually referred to the group of Monochlamyds.
7. To what British Order of Phænogams would the subjoined diagnosis apply:—*Corolla* gamopetalous, regular, hypogynous; *stamens* isomerous, epipetalous and opposite the corolla-lobes; *placenta* free central?
8. Describe the mode of growth of the root in flowering plants.
9. Give examples of plants with (*a*) whorled, (*b*) peltate, (*c*) palmately-veined, and (*d*) fasciculate leaves.
10. What peculiarities distinguish the fruit of the Cruciferæ? Of what parts is it formed, and how are its seeds arranged?

J. Reay Greene, *Professor.*

Surveying, Levelling and Mensuration.

1. In passing from one chain line to the next, how would you arrange your offsets, and what would be your object in the arrangement?
2. How would you set off a perpendicular with the chain only?
3. Explain the method of getting past an obstacle in chaining a line by the method of the transversal of a triangle, and prove the formula to be employed in calculating the required distance.
4. What is meant by repeating when measuring angles with the theodolite? Mention some occasions on which you might require to employ this method.
5. Describe the planimeter.
6. Describe the eidograph and its graduation. If a map was to be enlarged in the proportion of 5 to 3 how would you set it?
7. Describe the method of setting out a curve with the theodolite and chain.
8. What are the *odd* distances? How do you set out the points of the curve corresponding to them?
9. Width of formation level, 30 feet.
   Depth of cutting at centre, 2 feet.
   Sidelong slope of ground, 1 in 4.
   Slopes, 1½ to 1.
   Calculate area of cross section of cutting and embankment.
10. Prove the ordinary form of the prismoidal formula, as applicable to railway cuttings, in ground level in cross section.

Civil Engineering.

1. What do you mean by the set of iron when a load has been applied to it and removed? State what you know of the phenomena presented by wrought-iron when tensile strains, gradually increasing up to the breaking strains, are applied and removed.
2. In Hodgkinson's formula for the strength of cast-iron pillars, how were the values of the indices of the length and diameter determined?
3. A flanged girder is 50 feet long and 4 feet deep, and supports a uniformly distributed load of 32 tons; what is the strain in either flange at 9 feet from the end, neglecting the web, and assuming the strain throughout the cross section of the flange to be constant.
4. Prove the following formulæ for flanged girders:—

$$M=\frac{f}{c}\left\{\left(a_1+\frac{a_3}{3}\right)h_1^2+\left(a_2+\frac{a_4}{3}\right)h_2^2\right\}.$$

5. In a Warren girder, if a weight w is placed on an apex dividing the girder into m and n bays, show that the strain in any diagonal will be either

$$\frac{m}{l}w\sec\theta;\text{ or }\frac{n}{l}w\sec\theta.$$

Appendix D.

Selection of Papers used at the Sessional Examinations.

6. Discuss the nature of the strains produced in any diagonal of a Warren girder by a load rolling on and off the girder.

7. Find the deflection of a semi-girder loaded at the extremity.

8. What is concrete? Describe some of the methods of mixing it mechanically.

9. Write the specification for the brickwork in a bridge to carry a public road over a railway.

10. What are the principal ores from which cast-iron is obtained? Give some account of smelting any one of them.

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1. What is meant by *ruling gradients* on a line of railway? What limits are generally adopted for them under different circumstances?

2. Describe some of the remarkable examples of steep gradients and the method of working them.

3. Describe some of the ordinary systems of permanent way: 1st, when wooden sleepers are employed; 2nd, when iron sleepers are employed.

4. Describe the form of the boiler, fire-box shell, and fire-box in a locomotive.

5. Explain the action of the link motion.

6. Describe the construction of an ordinary cofferdam in 5 feet of water at low tide with a rise of tide of 10 feet.

7. Describe the construction of a Warren girder.

8. Describe some of the different constructions adopted for cast iron arches in large and small spans.

9. Give the ordinary formula for the discharge of water from a *small* orifice at a considerable depth.

10. Give the ordinary formula for the flow of water through a pipe or channel. Give what reasons you can for the adoption of this formula and state how far it is empirical.

11. What is meant by degrees of hardness of water? What is considered to be a sufficient supply of water to a town per head of the population?

GEOMETRICAL DRAWING.

1. If two right lines be parallel, and one of them be perpendicular to a plane the other shall be also perpendicular to the same plane?

2. Give a method for describing the Scotia curve.

3. Describe the Roman Doric order.

4. Given the traces of three planes; find the projection of their intersection.

5. Given the projections of a line and the traces of a plane; find the projections of their point of intersection.

6. Given the projections of a right circular cone, with its axis vertical; find the projections of the section of it made by a plane perpendicular to the vertical plane of projection, and parallel to one side of the cone.

7. Construct the real size of the section.

8. Given the projections of a line; find the shadow cast by the line on planes coincident with the two planes of projection when the shadow falls partly on each.

9. Prove the ordinary method of constructing relative natural and isometric scales.

10. If a horizontal line make an angle of 30 degrees with the picture plane and the distance of the picture be 15 inches, where will the vanishing point be, and how many inches from the centre of the picture?

11. Construct the development of the intrados of an oblique arch.

12. Give a construction in the picture plane for the vanishing point of a line lying in a vertical plane, making an angle θ with the picture plane, the line itself making an angle ϕ with the trace of the plane in which it lies.

13. Find the projection of the shadow cast by the edge of the abacus in the Tuscan order on the ovolo moulding below it.

14. Give and prove the expression for the tan of angle of skewback of extrado in a segmental oblique bridge.

ALEXANDER JACK, *Professor.*

FACULTY OF MEDICINE.

MATERIA MEDICA AND THERAPEUTICS.

Pass Questions.

1. TARTAR EMETIC.—Its chemical composition, characteristics, and tests: physiological action; therapeutical applications; doses and modes of administration.

2. CASTOR OIL.—Latin name; natural family of plant; active ingredient; physiological action; doses and modes of administration.

3. ALOES.—Physiological action; therapeutical uses; advantages and disadvantages; dose and administration.

4. Give the doses of—laudanum; tincture of aconite; liquor arsenicalis; croton oil; tincture of digitalis.

5. Describe the chemical reactions in the preparation of calomel; iodide of potassium; acetate of potash.

Prize Questions.

6. In what special cases of glandular disease does iodine exercise an absorbent action?

7. Describe the reactions which take place in applying the Prussian blue test for hydrocyanic acid.

8. How is the reaction of sesquichloride of iron with meconic acid distinguished from that with sulphyocyanides and acetates?

9. Enumerate the chief acrid cathartics, stating the essential distinguishing characteristics of each.

10. How do diuretics act? and what will guide you in the choice of the special one selected?

11. Give a general outline of the action and uses of emetics, classifying them according to the indications for their use.

N.B.—Questions to be answered *in order of sequence;* and *for prizes, pass questions first.*

PURCELL O'LEARY, *Professor.*

PRACTICAL ANATOMY.

1. Mention the connexions and processes of the sphenoid bone.

2. Describe the articular surfaces and ligaments connecting the ribs with the vertebral column.

3. Mention the insertions of the tendons of the following muscles, viz.—Peroneus longus, brevis, tertius, tibialis anticus and posticus.

4. Describe the recti capitis antici majores and minores muscles.

5. Describe the saphenous opening in the fascia lata; also the attachments of the iliac and pubic portions of that membrane.

6. Describe the origin, course, and termination of the posterior saphena vein.

7. Describe the origin, course, and relations of the arteria profunda femoris; then name the branches.

8. State the origin, course, and relations of the great sciatic nerve.

9. Describe the origin, course, branches, and inosculations of the subscapular artery.

ANATOMY AND PHYSIOLOGY.

1. What are the chemical components of the red corpuscles of the blood?

2. What is the composition of the serum of the blood.

3. What are the structures entering into the coats of an artery, and how are they disposed?

4. What are the textural arrangements in the lymphatic glands, and what are the relations of the lymphatic vessels with respect to these bodies?

5. What are the connexions of the crystalline lens?

6. What are the connexions of the iris, and what are the structures which compose it?

7. What are the connexions and relations of the ciliary processes?

Appendix D.

Selection of Papers used at the Sessional Examinations.

8. What is the average per-centage of carbonic acid in expired air, and what are the circumstances which affect its rate of production?

9. State the constituents of the urine and nature of urea; also state average quantity of urea and uric acid eliminated in twenty-four hours.

10. State the nature and composition of lymph and chyle.

J. H. CORBETT, *Professor.*

MIDWIFERY.

1. Describe those abnormal conditions of the pelvis in which obstruction is offered to the passage of the child's head during labour, at the brim, in the cavity, and at the outlet, respectively.

2. Describe the mucous membrane of the uterus as observed in the unimpregnated organ at ordinary times, during menstruation, and immediately after delivery.

3. What is a Graafian vesicle? Describe its structure and mode of connexion with the ovary; its progress towards maturation; and the ultimate changes which it undergoes.

4. Describe minutely the areola and nipple of a pregnant woman. What is the value of the former as a means of diagnosing the existence of pregnancy? When are its indications least to be trusted?

5. What is understood by extra-uterine fœtation? Enumerate the principal forms under which it occurs, with the usual terminations of each.

6. Give a descriptive detail of the physiological actions which are brought into play in the processes of the dilatation of the mouth of the uterus, and of the expulsion of its contents, in a natural labour.

7. What are the early positions of the head in the pelvis which eventuate in the child being born with its face to the pubis? What effect has this state of things on the progress of the labour?

8. What is understood by arrest; and what by impaction? State what steps you would take in case of either of these having taken place. Describe the operation you would have recourse to in each case.

9. State how you would manage a case of placenta prævia in which the placenta only reaches the edge of the os uteri; and also when it is central, or nearly so. What constitutional treatment would you adopt in both cases?

10. Detail the symptoms, both actual and premonitory, the pathology, and the treatment of puerperal eclampsia or convulsions.

J. (R.) HARVEY, A.B., M.D., *Professor.*

SURGERY.

1. Describe the changes produced by inflammation in the local circulation.

2. What are the symptoms of chronic inflammation of the tonsils: how is the disease produced; the varieties, structure, and the different methods of treatment?

3. Enumerate the varieties of talipes, their pathological anatomy, and the different kinds of treatment for each.

4. What are the different forms of hare-lip—the complications, treatment, and operations suited for each?

5. Detail the symptoms of strangulated inguinal hernia, the treatment, and operations.

6. How would you treat an oblique fracture in the middle of the thigh bone, with a tendency to displacement; and how is the reparation of fractures accomplished?

7. Detail the different forms of cancer and their treatment, and the signs which indicate and contra-indicate their removal by operation.

8. What are the dislocations of the shoulder joint, and the different methods of reduction for each, and when and how accomplished?

9. Describe the different methods of amputation, and the cases suited for each.

Surgery.

1. Describe what is meant by ulceration, and what by gangrene, and how the two processes differ, the one from the other.
2. What is understood by the term scrofula; what is the character of tubercle; what are its different forms and treatment?
3. What are the different fractures of the thigh bone; what the various methods of treatment and cases requiring amputation?
4. Describe the several kinds of stricture of the male urethra, their anatomical classification, and locality, and treatment.
5. What are the different forms of tritis, the symptoms common to each; how can they be distinguished, the one from the other; and their treatment?
6. What are the modes by which arterial canals are narrowed and obliterated by atheroma?
7. Describe the symptoms, progress, and treatment of the phosphorous disease.
8. What is the classification of hæmorrhoids of the rectum, their pathology, and treatment?

W. K. Tanner, *Professor.*

Physic.

1. What are the chief symptoms of variola, and the causes of death when it arises in this disease?
2. What are the chief sources of danger in intermittent fever? Give an explanation of the manner of their occurrence.
3. What are the leading symptoms of diphtheria, and in what does its chief danger consist?
4. What are the different forms of diarrhœa, and the exciting cause in each case?
5. Explain the symptoms and pathology of tabes mesenterica.
6. State the varieties of carcinoma, and its mode of propagation through the system.
7. What are the means adopted by nature to remove tuberculous matter deposited in any organ?
8. What is the essential cause of apoplexy, and what are the exciting causes?
9. What various changes in the circulatory apparatus are produced by constriction of the aortic valve and the modus operandi of these changes.

D. C. O'Connor, M.D., *Professor.*

Medical Jurisprudence.

1. What mode of examination is to be followed in the case of red stains on cloth, suspected to be blood? Can the blood of men be distinguished from that of other mammals?
2. Describe the chief signs from which an opinion may be formed that a child has arrived at maturity at the time of its birth.
3. How soon may death take place after submersion in water? What is the mode of treatment in cases of drowning?
4. Mention some articles of food which have occasionally given rise to symptoms resembling poison. Describe the symptoms which are usually produced.
5. What are the symptoms and the *post-mortem* appearances to which narcotics give rise?
6. Describe the process for the detection of morphia in the contents of the stomach.

J. Blyth, M.D., *Professor.*

Appendix D.

Selection of Papers used at the Sessional Examinations.

Medical Jurisprudence.

1. Distinguish between the manner in which the examination of a witness should be conducted on the direct from the cross-examination, and state the reason of the rule.

2. What must a witness have done to entitle him to refresh his memory while under examination, by reference to written documents?

3. Has a medical witness any privilege protecting him from the disclosure, in court of law, of statements confidentially communicated to him by a patient? Refer to the authority of a leading case in which this question was decided.

4. Distinguish the legal meaning of "a wound," "a maim," "a grievous bodily harm," and "a disabling," respectively.

5. Upon a charge of infanticide what constitute the "corpus delicti."

6. Upon a charge of murder by poison, is it essential that the specific kind of poison used must be proved?

7. In order to obtain an acquittal on the ground of insanity, what must be proved?

8. What is necessary for the valid execution of a will; and what may be regarded as one of the best tests of the existence of a capacity to make a will?

Michael Barry, *Professor.*

Faculty of Law.

Real Property and Conveyancing.—First Year Students.

1. What words are necessary to create an estate in fee, where land is granted by deed?

2. Land is granted by deed to A, and his heirs male, who dies leaving one daughter? What is the effect of such a limitation, and what estate does it create?

3. An estate is granted to A for life, with remainder to B and the eldest son of C (C having no son born at the time of the grant), what kind of estate in remainder will B and the after-born son of C take? Will they take the estate in remainder as joint tenants or not? Give the reason for the answer.

4. What is the word in a lease technically called by conveyancers the operative word?

5. What are covenants? State the distinction between those which run with the land and those that do not.

6. What is the deed proper for transferring the share of one joint tenant of land to his co-tenant?

7. A seized in fee bargains and sells for money land to B for a year; must B enter on the land in order to acquire the legal estate?

8. For what purpose is a subscribing witness to a deed necessary?

9. Give an instance of a title by act of law.

10. How many are the canons of descent? What is the third?

11. What were the requisites prescribed by the Statute of Frauds to validate a devise of freehold property? What are the requisites at present of a valid will?

12. For what period of time must title to land be traced back? What reason is assigned by Williams for the particular number of years required?

Equity.—Second Year Students.

1. Explain the distinction between equitable estates and interests created by way of trust executed, from those created by way of trust executory.

2. State the general maxim of equity on the principle of which a Court of Equity refuses to interfere against a *bona fide* purchaser for valuable consideration without notice of an adverse title.

3. In equity, from the time of a contract for the sale of land, the vendor is regarded a trustee as to the land for the purchaser, and the purchaser a trustee

as to the purchase money for the vendor—upon what principle in Equity is this relation founded?

4. Under what circumstances will real property become liable to legacy duty?

5. State the order of administration of different properties in payment of debts, and distinguish the manner in which legal and Equitable assets are applied.

6. In what cases will a Court of Equity refuse an immediate injunction to restrain the infringement of a patent?

7. In what cases will the writ "*ne exeat regno*" be granted by a Court of Equity?

8. For what purpose will a Court of Equity appoint a receiver, and what is the nature of his office and duties?

9. Out of what property will a Court of Equity enforce a settlement by a husband of a proportion on his wife?

Third Year Students.

1. State the ground on which Equity will not refuse relief to a *particeps criminis*. Hatch *v.* Hatch, 9th Vesy, jun., 292.

2. What was decided in the case of Hugenvin *v.* Basley (14, Vesy, jun., 273)? Upon what principle of Equity did Sir Samuel Romilly, in his argument in that case, rest the right of the plaintiff to relief?

3. What were the rules which governed the liability of a purchaser to look to the application of the purchase money (Elliot *v.* Merryman, Leading Cases, 48) previously to the enactment of the 22nd and 23rd Vict., chap. 35, and sec. 23.

4. What constitutes an infant a ward in chancery.

5. State the maxim of Equity on which relief by a decree for specific performance is grounded.

Personal Property.

1. Has the finder of goods any kind of property in them.

2. Has the doctrine of perpetuity any, and what application to personal estate.

3. If a chattel personal be given to A and the heirs of his body, what estate therein has A? Explain the principle on which this depends.

4. What are the provisions of the statute of frauds, as explained by the 9 Geo. IV., chap. 14, upon the sale of goods to the value of £10 or upwards.

5. What is the technical description of a promise by deed. To what class of contracts does it belong?

6. How may the right of a "stoppage *in transitu*" be defeated?

7. What is a lien. Explain the difference between a general and a particular lien.

8. What is the difference between a general and a special endorsement of a bill of Exchange?

Michael Barry, *Professor.*

Appendix E.

APPENDIX E.

Table giving List of Classes, No. of Lectures, and No. of Students attending same.

TABLE giving LIST of CLASSES and NUMBER of LECTURES, and of NUMBER of STUDENTS attending same.

	No. of Lectures Weekly.	No. of Lectures.	No. of Students.
Greek,	10	233	45
Latin,	9	204	42
English Literature,	3	65	9
,, Language,	3	40	27
History,	3	54	2
Do. Honor,	3	47	2
French,	9	225	72
Mathematics,	9	200	50
Chemistry,	3	70	53
Practical Chemistry,	7	45	29
Natural Philosophy,	14	291	62
Natural History,	3	68	30
Political Economy,	4	24	5
Geology and Mineralogy,	3	74	21
Logic,	3	39	13
Metaphysics,	3	63	4
Engineering,	12	253	39
Anatomy and Physiology,	5	105	70
Practical Anatomy,	5	102	68
Surgery,	3	65	35
Midwifery,	3	65	37
Medicine,	3	60	28
Materia Medica,	3	59	29
Medical Jurisprudence,	4	36	23
English Law,	9	72	7
Civil Law,	6	48	5

Appendix F.

'PENDIX F.

Form of Circular from President, and special Reports from Professors.

FORM of CIRCULAR from :ESIDENT, and SPECIAL REPORTS from PROFESSORS.

RETURN to be filled up by the Professor of Materia Medica, and to be returned to the Registrar, so filled up, for the official information of the President, on or before the————, being for the Collegiate Session 1866—67.

A.—As to the course or courses of lectures given by the Professor. 1st. Duration and extent of the course; number of terms. 2nd. Number of weeks of lectures in each term. 3rd. Number of lectures weekly, and days and hours of lectures.

B.—The description or title of the course or courses of lectures delivered, and a general abstract of the subjects of instruction contained in the course, and the title of the text-books recommended.

C.—Whether the lectures are illustrated by reference to maps, diagrams, specimens, or experiments; and a general notice of the kind of illustrations used.

D.—Whether any method of tutorial, or other special instruction, is employed, as by setting out portions of text-books for lessons, by themes, or exercises in composition, or problems; and whether special class examinations are held, and at what time; or whether herborization excursions, or field exercises, are given.

E.—What faculties or division of students are those attending courses of lectures of the professors making the return.

F.—The number of students attending each course—distinguishing matriculated and non-matriculated students; and the general regularity of attendance.

G.—The general conduct of students at the Professor's lectures; and the general state of discipline as regards the Professor's classes.

II.—The general condition of the department of which the Professor has charge, as to supplies, fitments, cleanliness, and accommodation, for the purposes of instruction. *Appendix F.* Form of Circular from the President, and Reports from Professors.

The Professor, in making the above returns, is requested to mark the answers with the letter designating the portion of the form of return, as above, to which each answer refers.

Signed, by order of the President,

R. J. KENNY, *Registrar.*

REPORT of PROFESSOR of GREEK.

A.—1. The course of lectures extended over three terms. 2. The first term contained 9 weeks; the second, 13 weeks; and the third, 5 weeks. There were 10 lectures delivered in each week, viz., between the hours of 9 and 11 o'clock, A.M., on every day except Saturday.

B.—The course of the Greek language and literature.

C.—There are maps for reference on the walls of the lecture-room.

D.—Portions of authors were prepared in the intervals between the lectures, which the students were examined. Exercises in prose and verse composition, according to their proficiency, were required.

E.—By students of the Faculty of Arts exclusively.

F.—Forty-seven matriculated students. The attendance was, in the case of the great majority of the students, very regular.

G.—The general conduct of the students was very satisfactory, and the discipline good.

H.—Satisfactory.

JOHN RYALL, *Professor of Greek.*

REPORT of the PROFESSOR of LATIN.

A.—The course extended through three terms. First term, 8 weeks; second term, 12 weeks; third term, 3 weeks. Junior class, 4 lectures weekly; senior class, 3 lectures weekly; extra and third year's class, 2 lectures weekly.

B.—The Latin language. Text-books of lectures:—Junior class: Livy, part of Book II.; Horace—Epistles, part of Book I. Senior class: Juvenal—Satires, V., VII., and VIII.; Cicero—De Officiis, part of Book I. Extra and third years' class: Lucretius, part of Book II.; Tacitus—Histories, Book II., chapters 1–44.

C.—The lectures were illustrated by references to the art collections belonging to the college.

D.—The students prepared a portion of the text-book for each lecture; they also wrote Latin exercises in prose and verse.

E.—Students in Arts.

F.—Forty-two, all matriculated.

G.—Satisfactory with few exceptions.

H.—Satisfactory.

B. LEWIS.

REPORT of the PROFESSOR of HISTORY and ENGLISH LITERATURE.

A.—1. Two terms, History and English Literature; one term, English Language. 2. History—first term, 8 weeks; second term, 10 weeks: honor course—first term, 6 weeks; second term, 9 weeks. English Literature—first term, 8 weeks; second term, 9 weeks: extra—first term, 8 weeks; second term, 13 weeks: early English—first term, 5 weeks; second term, 6 weeks. English language—second term, 13 weeks. 3. History—3 lectures weekly—Monday, Wednesday, Friday, 1–2; honor course, 3 lectures weekly—Monday, Friday, 10–1, Wednesday, 2–3. English Literature—3 lectures weekly—Tuesday, Thursday, 12–1, Saturday, 11–12; extra, 3 lectures weekly—Monday, Wednesday, Friday, 12–1. Early English, 2 lectures weekly—Tuesday, Thursday, 2–3. English Language—3 lectures weekly—Tuesday, Thursday, 11–12; Saturday, 10–11.

B.—History—European: Gibbon, Decline and Fall; Hallam, Middle Ages. English: Hume, History of England; Hallam, Constitutional History of Eng-

Appendix F. — Reports from Professors.

land. English Literature: Chambers's Cyclopædia of English Literature; Craik, English Literature; Marsh, Lectures. English Language: Craik's Outlines.

C.—The lectures on History are illustrated by Bell's Chronological Tables, and Von Spruner's Maps.

D.—The students are generally examined on the subjects discussed at the previous lecture. In the classes of English literature and English languages exercises are prescribed once a week.

E.—Arts and Medicine.

F.—History, 2 students matriculated. Honor course, 2 students matriculated; English Literature—9 students matriculated; extra, 4 students matriculated; early English, 6 students matriculated; English Language, 27 students matriculated. Attendance regular.

G.—Discipline satisfactory.

H.—Condition of the department much improved by the carpets and furniture added to the private rooms of the Professors.

WM. RUSHTON.

REPORT OF THE PROFESSOR OF MODERN LANGUAGES.

A.—There were three courses of lectures on the French language and literature during the session. 1st class of medical students; 2nd class of senior French; 3rd class of junior French.

1st. Each course continued during the whole Session:—namely, three terms.

2nd. The first term comprised 9 weeks; the second, 13 weeks; the third term, 5 weeks.

3rd. The lectures in each class were given three times a week—at 12, 1, and 2 o'clock.

B.—In the class of medical French, Achille Comte's *Lectures sur les Sciences* was the text-book: numerous extracts from Bichat, Lallemant, Chomel, &c., were read and dictated. In the Senior French class, Moliere's *Misanthrope*, Racine's *Shedre*, Fables de *Lafontaine*, and Demogeot's *Literature Francaise* were read. In the junior French, Moliere's *Avares*, Racine's *Esther*, and Demogeot's *Literature Francaise*.

C.—The lectures require no illustrations, &c.

D.—The method of tutorial instruction is employed, the students having portions of their text-books to prepare, as well as to write translations and exercises. Once a week, lectures on the Syntax, Comparative Grammar, and Literature, to each class.

E.—The students who attend the classes in modern languages belong to the faculties of Medicine, of Arts, and to the Engineering school.

F.—The general attendance of students in each class was satisfactory. The number of students in each class was, 25 in the medical; 23 in the senior, and 24 in the junior.

G.—The general conduct of the students during the session was very good.

H.—The condition of lecture-rooms, &c., very satisfactory.

R. DE VERICOUR.

REPORT OF THE PROFESSOR OF NATURAL PHILOSOPHY.

E.—The senior class of Experimental Physics was attended by students of the second year in Arts, and the second year in Engineering; the honor courses by students of the third year in Arts; Engineering Physics by students of third year in Engineering, and the junior class of Experimental Physics by students of the first year in medicine.

F.—Senior class of Experimental Physics 18; junior class of Experimental Physics 27; Mathematical Physics (honor) 2; Experimental Physics (honor) 3; Mathematical Physics (Engineering) 11; Engineering Physics, 12. The attendance in all was regular.

G.—The conduct of the students was satisfactory.

H.—The arrangements for carrying on the business of the department were satisfactory.

JOHN ENGLAND.

Report of the Professor of Chemistry.

A.—First course of 3 terms; first term of nine weeks; second of thirteen weeks, and third of five weeks. Three lectures per week, on Monday, Wednesday, and Friday, from 11 to 12. Second course of 3 months, on Monday, Wednesday, and Friday.

B.—First course; Systematic Chemistry, embraced the laws of combination; history of metallic and non-metallic substances; theories of organic Chemistry, and description of organic compounds. Text-books—Fownes, Graten, Kane, Miller, Regnault, Williamson, and Roscoe. The second course was conducted in the laboratory.

C.—Illustrated by diagrams, specimens, and experiments.

D.—In first course by lectures, and by explanations of difficulties after lectures to students. In the second course, each student works under the Professor's superintendence.

E.—Students of the Faculties of Medicine, Engineering, and a few from Arts, attend the course. Medical students alone attend the second.

F.—In the first course, 45 matriculated and 8 non-matriculated; and in the second or Practical Chemistry, 25 matriculated and 4 non-matriculated. The general attendance was good.

G.—General conduct good, and state of discipline also good.

H.—The department is well provided with supplies, fitments, and apparatus for the purposes of instruction. The ventilation of the public laboratory, complained of in my last report, is still most defective, and positively injurious to health.

J. Blyth, M.D.

Report of Professor of Civil Engeering.

A.—1. Each course of lectures extends through the three terms. 2. In the first term, 9 weeks; second, 13; third, 5. 3. Three lectures weekly in each course. Students of first year, Monday, Wednesday, Friday, 10, A.M.; second year, Tuesday, Thursday, Saturday, 10, A.M.; third year, Monday, Wednesday, Friday, 12, noon. Office open Tuesday, Thursday, Saturday, from 10, A.M. to 2, P.M.

Total number of lectures:—

Students of first year,	. . . . .	64
,, second year,	. . . . .	63
,, third year,	. . . . .	66
In office,	. . . . .	60
	Total, . .	253

B.—*First year.*—Descriptive Geometry; Orthographic Projection; Shadows; Isometric Projection; Perspective; Principles of Architecture; Geometry of the Oblique Bridge. Text-books:—Hall's Descriptive Geometry; Engineer and Machinist's Drawing Book; Rickman's Architecture; Buck on the Oblique Bridge. *Second year.*—Surveying, Levelling, and Mensuration. Text-books:—Rankin's Civil Engineering; Cotton's Manual of Railway Engineering; Williams' Geodesy. *Third year.*—Materials used in Construction; Principles of Construction of Bridges, Roads, Railways, Canals; Hydraulic Engineering; Strength of Materials; Principles of Construction of the chief machines employed by the Engineers. *Drawing Office.*—First year students are chiefly employed in drawing the problems given at lectures, and a few easy examples of their application. The second and third years' classes in making working drawings of examples of the subjects of lectures, and in mapping.

C.—Illustrated by reference to maps, drawings, and instruments.

D.—The tutorial and professorial methods of instruction are adopted, according to the subject of the lecture. Instruction is given in the field.

E.—Students in the department of Civil Engineering.

F.—

Students of first year,	. .	Mat.	21	Non-Mat. —
,, second year,	. .	,,	5	,, —
,, third year,	. .	,,	13	,, —
			39	—

Appendix F.
Reports from Professors.

The majority of the students have attended tolerably regularly.
G.—Conduct of students very good.
H.—General condition of department good.

ALEXANDER JACK.

REPORT OF THE PROFESSOR OF NATURAL HISTORY.

A.—One course on Zoölogy and Botany. 1. The course consisted of 68 lectures, and extended over three terms. 2. The first term included 9; the second, 12; and the third. 3 weeks of lectures, 3. Three lectures weekly, at 3, P.M., on Mondays, Wednesdays, and Fridays.

B.—The course embraced lectures on the principles of Zoölogy and Botany, and on the Structure and Classification of Plants and Animals. The text-books used were Milne Edwards' Zoölogy, and Renfrey's Elementary Course of Botany.

C.—The lectures were illustrated by reference to specimens and diagrams. Herborizations were given during the third term.

D.—The professional method of instruction was chiefly employed.

E.—The lectures were attended by students of the third year in the Arts, and of the first year in Medicine.

F.—Five students in Arts (including one graduate), 25 in Medicine, and 6 non-matriculated students were present during the course. Ten of these attended *diligently*, 22 *duly*, while 4 were disqualified for insufficient attendance.

G.—Satisfactory.

As stated in last year's Report, save that the walls of the Zoölogical Museum have since been coloured, and that some of the locks of the cases have been repaired. The Professor would again complain of the very inadequate manner in which the Museum is still heated; the stoves placed there by the Board of Works being, moreover, of so bad a construction, that coal, ashes, and dust are freely dispersed therefrom, throughout the room; to the injuiry of the appearance of many of the specimens.

J. REAY GREENE.

REPORT OF THE PROFESSOR OF MINERALOGY AND GEOLOGY.

A.—The course of lectures on Mineralogy and Geology extended over the three terms of the Collegiate Session; the number of weeks of lectures in the first term being 9, in the second 14, and in the third 3.

Three lectures were given during the week; the days and hours being Tuesday and Thursday, from 2 to 3 P.M., and Saturday, from 10 to 11 A.M.

B.—The course, besides Mineralogy and Geology, also included Physical Geography and Palæontology. The books recommended as text-books on these several subjects were Hughes' Outlines of Physical Geography, Herschell's Physical Geography, Somerville's Physical Geography, Nicol's Manual of Mineralogy, Page's Elementary Text-book of Geology, Lyell's Elements and Principles of Geology, Jukes' Manual of Geology, Murchison's Siluria, and Owens' Palæontology.

C.—The course of lectures was illustrated by maps, sections, diagrams, specimens, and models.

D.—The mode of instruction was professional; and near the end of the Session, when not interfering with other departments of the College, field instruction was given in Pratical Geology.

E.—The students attending the lectures, with the exception of two, viz., one a B.A., and the other an Agricultural Student, belong to the first year's Engineering Class.

F.—The number of students attending the course was 21, all being matriculated except the Agricultural Student; and the attendance on the whole was very regular.

G.—The conduct of the students was such as to meet with the Professor's approval.

H.—As regards fitments, supplies, cleanliness, and accommodation, these are now in such a state as to answer nearly all the requirements of the class.

ROBERT HARKNESS.

Report of the Professor of Logic and Metaphysics.

Reports from Professors.

A.—On Logic and Metaphysics—1. Logic, 1 term; Metaphysics, 2 terms. 2. Two terms. Logic, Tuesdays and Thursdays, at 11 o'clock; Saturdays, at 9 o'clock. Metaphysics, Tuesdays and Thursdays, at 1 o'clock; Saturdays, at 10 o'clock.

B.—Logic, Deductive and Inductive—Aldrid, parts of Mill, Baynes, and Thompson. Metaphysics, History of Philosophy and Psychology; History of Philosophy of the University of France.

C.—No illustrations are used except such as are drawn or written on the board during the course of the lectures.

D.—Both the tutorial and professional systems are used.

E.—Logic, second years' students in Arts; Metaphysics, third years' students in Arts.

F.—Logic, 13; Metaphysics, 4. All matriculated; attendance very satisfactory.

G.—Conduct of the students in the class-rooms unexceptionable.

H.—The inconvenience with regard to lecture-rooms complained of in the last report, continued throughout the Session, but has been removed during the present Session.

G. J. Read.

Report of the Professor of Jurisprudence and Political Economy.

A.—1. Political Economy, 24 lectures; 2 terms. 2. Jurisprudence, 23 lectures; 2 terms. 3. Civil Law, 21 lectures.

B.—Political Economy—Rent, profit, and wages; commerce, taxation, currency, and banking. Text-books—J. S. Mill, Fawcett, Senior, Mills. Jurisprudence—Selections from the writings of Maine, Stephens, and lectures of the Professor. Civil Law—Sandars' Justinian.

C.—No.

D.—The tutorial and professional methods are both employed.

E.—In Political Economy; Arts Students; in other subjects, Law Students.

F.—In Political Economy 5 matriculated. In Jurisprudence 4 matriculated. In Civil Law 1 matriculated.

G.—Very good.

H.—The inconvenience with regard to lecture rooms, complained of in my last report, continued during the Session, but has been removed in the present Session.

R. H. Mills.

Report of the Professor of English Law.

A and B.—Three courses were given, comprising twenty-four lectures, to each of the first, second and third classes in English law. The subjects were, as prescribed, real property and conveyancing, in the class of the first year. Equity, bankruptcy, and personal property in the class of the second, and common and criminal law in the class of the third year. The text-books used in the several classes were Williams on Real Property, Williams on Personal Property, Smith on Contracts, Smith's Manual of Equity Jurisprudence, Story's Equity Jurisprudence, Smith's Leading Cases, Blackstone's Commentaries, and the several other books specified in the prospectus were recommended for perusal and study to the students.

C.—The several subjects were elucidated by precedents, and as far as possible by practical cases and references to the law and equity reports.

D.—Tutorial, and by exercises in the application of precedents, &c., and oral examination.

E.—Arts and Law.

F.—Four in the class of the first, one in the class of the second, and two in the class of the third year.

G.—The conduct of the students was unexceptionably good. The attendance in the class of the third year was not good or regular.

H.—Amendments in the law, made by recent statutes, render new editions of the several text-books essential, and which I have taken leave already to certify to the President.

Michael Barry.

Appendix P.

Reports from Professors.

REPORT of the PROFESSORS in charge of the Class of MEDICAL JURISPRUDENCE.

A.—Three months, during which thirty-six lectures were delivered. The days of lecture were Tuesday, Thursday, and Friday.

B.—The subjects chiefly enlarged upon were toxicology, chemical tests, the rules of evidence in legal procedure, infanticide, wounds, and insanity. The text-books Taylor and Guy, Beck and Pans, and Fonblanque, were also recommended for perusal by the students. The Leading Cases were referred to; for example, Lord Ferrer's case, the Duchess of Kingston's case, Hadfield's case, the Gardner and Douglas Peerage case, &c.

C. and D.—By experiments and lectures illustrated by them.

E.—Students of the faculty of medicine.

F.—There were twenty-three students in the class.

G.—The attendance, conduct, and discipline of the class were excellent.

H.—The class continues dependent on the chemical department for apparatus and the materials necessary for the toxicological portion of the course.

J. BLYTH, M.D.
MICHAEL BARRY, B.L.

REPORT of the PROFESSOR of ANATOMY and PHYSIOLOGY.

A.—Two courses delivered daily (Saturday excepted) during the Medical Session: Anatomy and Physiology at one o'clock; Anatomical Demonstrations at twelve o'clock.

B.—One course entitled Anatomy and Physiology, the other course Anatomical Demonstrations and Practical Anatomy. The dissections performed by the students are superintended by the Professor of Anatomy and by his assistants, Doctors SHINKWIN and JONES, Demonstrators of Anatomy.

The course of Anatomy and Physiology comprehends the following subjects: 1. Nature of life and organization; general description of the vital functions; general and special description of the textures of the human frame; development of tissues and other branches of Histology; composition of the fluids, viz., the blood, lymph, chyle, saliva, gastric juice, bile, &c. 2. Physiological Anatomy of the organs of support and locomotion, circulation, respiration, digestion, chylification, absorption, secretion, excretion, reproduction; the brain and its membranes; the spinal cord and membranes; the ganglia and nerves; the organs of touch, smell, vision, hearing, taste; organ of voice, &c. 3. The course comprehends all branches of human Physiology; various subjects comprised in it are elucidated by reference to Comparative Anatomy and Physiology.

The course of Structural Anatomy is illustrated by microscopical preparations, &c.

The course of Anatomical Demonstrations includes the special description of the bones, joints, ligaments, arteries, veins, nerves, membranes, and fascid; it also embraces Regional and Surgical Anatomy.

The text-books are the following, viz.:—Todd and Bowman on Physiological Anatomy; Carpenter's Physiology; Valentine's Physiology; Kirke's Handbook of Physiology; Quain's Anatomy; Harrison's Anatomy; Wilson's Vade Mecum; Gray's Anatomy; Ellis's Demonstrations; Corbett on the Arteries, &c.; Kölliker and Hassal on Microscopic Anatomy.

C.—The lectures are illustrated by recent and prepared dissections; by plates, diagrams, and anatomical preparations, &c.

D.—The students are examined *viva voce*, upon subjects treated of in the course; written replies to questions proposed have been resorted to only at the examinations held in October for Medical Scholarships, and at the Sessional Examinations which take place in May.

E.—These courses have been attended only by students of Medicine and Surgery.

F.—The course of Anatomy and Physiology was attended by 60 matriculated and 10 non-matriculated students.

The course of Demonstrations and Practical Anatomy by 57 matriculated and 7 non-matriculated students.

G.—The students have attended the lectures with great regularity.

H.—The Anatomical preparations, plates, charts, &c., are good, but there is much necessity for additions to the collections in the Anatomical Museum.

Accommodation has recently been much improved; the apartments are kept in a state of cleanliness.

J. H. CORBETT.

REPORT of the PROFESSOR of PRACTICE of PHYSIC.

A.—Lectures on the Practice of Physic, delivered from November 1st to 30th of April following—three terms the first six weeks; the second and third varying with the time of Easter. Three lectures each week from three to four o'clock.

B.—The course embraces all the subjects of Internal Pathology, with the treatment and causes of the diseases. The text-books are Aitken's Science and Practice of Medicine and Watson's Lectures.

C.—Illustrated by pathalogical specimens and plates.

D.—The students are examined from time to time on the subjects of the course of lectures.

E.—Students of the Faculty of Medicine.

F.—Attended by 27 matriculated and 1 non-matriculated student.

G.—Nothing can exceed the good conduct and discipline of the students.

H.—There is as yet a deficiency in the pathological specimens caused by the burning of the College.

DENIS CHARLES O'CONNOR, A.B., M.D.

REPORT of the PROFESSOR of SURGERY.

A.—The courses of lectures to be continued for the three terms, on every Tuesday and Thursday from four to five o'clock, and on Saturday from one to two.

B.—Theory and Practice of Surgery; Druett's Manuel of Modern Surgery; Erichsen, Chelius, and Cyclopædia of Practical Surgery.

C.—Diagrams, specimens, the microscope, and operative surgery on the subject.

D.—Occasional class examinations.

E.—Faculty of Medicine.

F.—Matriculated, 34; non-matriculated, 4.

G.—The students' general conduct and state of discipline, without exception, very good.

H.—Department is deficient in supplies and fitments.

W. J. TANNER.

REPORT of the PROFESSOR of MIDWIFERY.

A.—Midwifery. Six months' course. About 60 lectures. Three lectures weekly—Monday, Wednesday, and Friday, four o'clock.

B.—Midwifery. Physiology of the functions of reproduction and gestation. Parturition in its various bearings, theoretical and practical. Diseases of child-bed. Management and diseases of infants.

C.—Diagrams, preparations, models, instruments, &c.

D.—

E.—Medical.

F.—Matriculated students, 35; non-matriculated, 2; total, 37. General attendance good.

G.—Very good.

H.—Means of illustration not so full as could be desired.

J. R. HARVEY, A.B., M.D.

REPORT of the PROFESSOR of MATERIA MEDICA.

A.—One six months' course. Three lectures weekly, on Tuesdays, Thursdays, and Saturdays, from 3 to 4 P.M.

B.—Lectures on Materia Medica and Therapeutics, comprising general Jamotology, Pharmacognosy, Pharmaco-dynamics, Pharmacy, Formulation and Posology. Hygiene and Balneology.

C.—Illustrated by diagrams, chalk drawings on the board, and microscopical demonstrations.

Appendix F. Reports from Professors.

D.—By microscopical demonstrations and exhibition of specimens of the Materia Medica.

E.—Students of the medical faculty.

F.—Twenty-nine students. Attendance most regular.

G.—Conduct at lectures irreproachable. Greatest attention shown on the part of the students.

H.—Lecture-room into which I was hurried by the council altogether unfitted. Fire-place most inconvenient, the fire being close to the lecturer's back. No proper black-boards or place to hang diagrams. Windows so placed as to prevent students from seeing anything written on the boards, the whole rendering it impossible to lecture with any satisfaction.

PURCELL O'LEARY.

Appendix G. List of successful Candidates.

APPENDIX G.

LIST of UNIVERSITY DEGREES, of DIPLOMAS, and of HONORS obtained by STUDENTS from QUEEN'S COLLEGE, CORK, at the UNIVERSITY COMMENCEMENTS in JUNE and OCTOBER, 1867; and of PEEL EXHIBITIONS awarded to STUDENTS of QUEEN'S COLLEGE, CORK, in OCTOBER, 1867.

DEGREE OF M.D.

Second Class honors:—Thomas Ryan, B.A.

Third Class:—Patrick Cremen and Hugh S. Kean.

Unclassed:
- Mark E. Anthony.
- John Barry.
- William F. Bennett.
- Robert D. Corbett.
- James W. Fisher.
- Edmond M. Fitzgerald.
- John F. Fitzpatrick.
- John B. Fitzsimon.
- David Forbes.
- Matthew M. Galway.
- Michael U. Greany.
- Thomas Kingston, B.A.

Unclassed—*continued:*
- Frederick Lyons.
- William H. Macnamara.
- Patrick Martin.
- Roslewin Morgan.
- James A. O'Brien.
- Charles G. Purcell.
- William N. Robinson.
- Francis E. Roche, B.A.
- John Roche.
- Thomas H. Sandeford, B.A.
- John O'Neill Sisk.

DEGREE OF M.CH.

- William F. Bennett.
- Robert D. Corbett.
- James W. Fisher.
- Edward M. Fitzgerald.
- John F. Fitzpatrick.
- Matthew M. Galway.
- William B. Johnston.
- Frederick Lyons.
- Patrick R. Martin.
- James A. O'Brien.
- Francis E. Roche, B.A.
- Thomas H. Sandeford, B.A.
- John O'Neill Sisk.

DEGREE OF M.A.

Second Class Honors:—John J. Foley, in Natural Science.

Unclassed:—Robert A. Jamison.

DEGREE OF B.A.

First Class Honors:—Arthur Anglin, in Mathemetical Science.

Second Class Honors:—

William J. Fitzgerald, in Ancient Classics.

Benjamin Hamilton, in Ancient Classics.

Stephen Ronane, Logic, Metaphysics, and Political Economy.

Unclassed:
- Robert A. Jamison.
- Alexis M'Auliffe.
- Maurice W. S. Moriarty.
- Francis Nunan.

DIPLOMA IN ENGINEERING.

Third Class:—Joseph H. Thornhill.

Unclassed:
- Robert French.
- William Good.
- Michael A. Lacy.
- Philip T. Large.
- Peter Mulcahy.

Appendix G.

List of successful Candidates.

FIRST UNIVERSITY EXAMINATION IN MEDICINE.

Unclassed:—
John M. M. Brown.
Philip Cogan.
William Boyle Coghlan, B.A.
Henry A. H. Cox.
George Finlay.
John B. Fitzsimon.
David Forbes.
David H. Hadden,
Arthur H. Hannon.
Denis Harrington.
Francis Healy.
William D. Isaac.
John Leonard.
John Lloyd.

Unclassed:—
Alex. S. Merrick.
John H. Miles.
Richard A. Mowle.
Patrick Murphy.
Francis Nunan.
Matthew D. O'Connell.
Michael O'Mally.
Stephen O'Sullivan.
Arthur V. Smyth.
Henry G. Smyth.
James Sweetman.
Alexander Tronsdell.
Patrick L. Walsh.
Henry Weldon.

FIRST UNIVERSITY EXAMINATION IN ARTS.

First Class, with Honors:—
Arthur N. Anglin, and William G. Fitzgerald.

Third Class, with Honors:—
Stephen Ronane.
Benjamin Hamilton.

Unclassed:—
Thomas H. Gillman.
Maurice W. S. Moriarty.

With Honors—*continued:*
John O'Driscoll.
Michael Molony.

Unclassed—*continued:*
Thomas Power.

FIRST UNIVERSITY EXAMINATION IN ENGINEERING.

Second Class, with Honors.—Joseph H. Thornhill.

Unclassed:—
Thomas Belcher.
James Forrest.
Robert French.
William Good.

Unclassed—*continued:*
Richard W. Johnson.
Townsend Large.
Francis Martin.
Robert A. Thompson.

APPENDIX H.

Appendix H.

Report of the Librarian.

SPECIAL REPORT from the LIBRARIAN of the College.

The number of volumes in the Library at present is 18,529. They may be classified as nearly as possible as follows:—

Pure Mathematics,	603	History,	2,494
Mixed do.,	571	Biography,	542
Chemistry,	940	Antiquities,	276
Geology and Palæontology,	595	Geography, Voyages, and Travels,	598
Botany and Zoölogy,	1,438	Engineering,	453
Medical Science, &c.	2,012	Agriculture,	208
Theology,	324	Fine Arts,	194
Logic, Metaphysics, &c.,	420	Bibliography,	86
Jurisprudence and Political Economy,	518	Encyclopædias, &c.,	625
Education,	176	Total,	18,529
Law,	824		
Ancient Classical Literature,	1,853		
English Language and Literature,	1,281		
Modern European Literature,	1,438	Increase in number of volumes over last report,	398
Celtic Literature,	59	Of these, 9 volumes were presented.	

The number of students using the Library during the past Session was considerably larger than usual. Their conduct has always been very good. I have had no occasion to report any breach of discipline.

There are no losses to Library during the Session.

The complaint I made in last report respecting the Consulting Library has been only partially remedied. The damp is causing great injury to the valuable property there collected.

Appendix H.

Report of the Librarian.

I have been engaged for the past Session in a revision of the Library, and the preparation of a new catalogue. So far as the lending department is concerned, this is nearly complete, and will prove a source of great convenience.

Cleanliness and order are properly attended to.

The College booksellers, Messrs. Hodges and Smith, continue to supply the orders in a satisfactory manner.

MATTHIAS O'KEEFFE, *Librarian.*

Appendix I.

Copies of Accounts furnished by Bursar.

APPENDIX I.

COPIES of the several ANNUAL ACCOUNTS furnished by the BURSAR, showing the FINANCIAL POSITION of the College.

No. 1.

GENERAL ABSTRACT of the ACCOUNT of the PRESIDENT or VICE-PRESIDENT, and BURSAR, of QUEEN'S COLLEGE, CORK, from 1st April, 1867, to 31st March, 1868.

DR. HEAD OF SERVICE (RECEIPTS).	£	s.	d.
To Balance on the 1st April, 1867,	1,307	12	2
,, Amount received from Paymaster of Civil Services,	8,336	12	5
,, Fees and Fines,	82	5	6
	£9,726	10	1

CR. HEAD OF SERVICE (PAYMENTS).			
By amount paid for Salaries,	5,444	12	7
,, ,, ,, Scholars and Prizes,	1,377	17	6
,, ,, ,, Porters and Servants,	330	15	4
,, ,, ,, Additional Grant,	1,364	14	9
,, Special Grant (Mathematics),	36	18	0
,, Balance,	1	1	8
,, Balance indebted on 31st March, 1868,	1,169	16	5
	£9,725	16	3

No. 2.

ACCOUNT of EXPENDITURE of the ANNUAL PARLIAMENTARY GRANT of £1,000 for the Year ending 31st March, 1868.

DR.	£	s.	d.
By Balance to debit of Bursar from last year,	6	18	5
,, amount of Grant,	1,000	0	0
,, receipts from fees and fines,	82	5	0
	£1,089	3	5

CR.			
By amount of expenditure on the several Departments:—			
1. Ancient and Modern Philology and Literature,	182	14	1
2. Mathematical, Physical, and Chemical Sciences,	131	19	3
3. Natural Sciences,	91	14	7
4. Engineering,	36	0	3
5. Medical Sciences,	111	0	9
6. Metaphysical, Legal and Economical Sciences,	64	4	4
7. Printing, Stationery, Advertising, Postage, and Office Expenses, including porter's clothing,	350	4	1
8. Heating and Lighting,	230	3	10
9. Botanic Garden and Grounds,	166	5	6
Total expenditure on account of Grant to March 31st, 1868,	£1,364	6	8
By amount of Credit as above,	£1,089	3	5
Balance to credit of Bursar on 31st April, 1868,	275	3	3

E. M. FITZGERALD, *Bursar.*

APPENDIX K.

Reports of Vice-President and Deans of Residences.

REPORT OF THE VICE-PRESIDENT ON DISCIPLINE, AND REPORTS OF THE DEANS OF RESIDENCES OF THE SEVERAL RELIGIOUS DENOMINATIONS.

RETURN OF THE VICE-PRESIDENT.

A.—The several departments of the College were in an efficient and satisfactory state.

"B.—The order and discipline of the College were well maintained—there having occurred, during the Session, no breach of discipline calling for the intervention of the College Council.

I think it necessary to add to this report, for the information of Her Majesty, that during the whole of the Session, with the exception of a few days, I superintended the discipline of the College in the character of Acting President, in the absence of the President, as required by the statutes.

JOHN RYALL, *Vice-President.*

REPORT OF DEAN of RESIDENCES for STUDENTS of the ESTABLISHED CHURCH.

2, South Terrace, Cork,
March, 24, 1868.

SIR,—In reply to your letter requesting me to furnish my annual report of the conduct of the students of the Queen's College, Cork, who belong to the Established Church, I beg leave to submit the following statement:—

I have had the honour of holding the office of Dean of Residences for more than eleven years. During all that time I have delivered lectures every week to the students who were willing to attend, and twenty-seven of them, more or less regularly, availed themselves of these lectures last year. Although the late charter recognised the Deans as the religious teachers, and beyond all doubt, gave the Council the power of allowing the Deans to lecture inside the walls of the College and made habitual neglect of religious instruction, one of the most serious offences that could be charged upon a student—in short, although the late charter made every provision for the religious education of the students belonging to the various denominations, the Council of the Queen's College, Cork, has steadily refused to allow the Deans of Residences any lecture rooms in the College. As the College is situate more than half a mile outside the city it is evident the students are put to a great inconvenience if they attend lectures anywhere in the city. The Council has refused to recognise in any way the general supervision of the Deans, and the consequence is, at present, if a student does not live in a licensed boarding house—and there is only one licensed house for over one hundred Protestant students, and this house accommodates only four—the consequence I say is, that from the time a student leaves the lecture room in the evening until he meets the Professor the next morning in the College he is *under no supervision whatever.* It is not true to say that the parents of the students are aware of this. The parents are under the impression that the Deans have some responsibility in looking after the students. Nothing can exceed the propriety of conduct of many of the students, but my deliberate conviction is that if some means be not adopted to bring the students under the supervision of the Deans the Queen's College, Cork, will soon deserve the reproach of being called a "godless College," and I shall be forced very reluctantly to sever my name from all connexion with it.

I venture to speak merely of what effects the life of the students while they are receiving their education in the College, but I might refer to many instances of grievious injustice done to the students in after-life, in consequence of the merely nominal existence of Deans. I am frequently applied to as Dean for a testimonial to the character of a particular student. It is all in vain for me to say that I know nothing of the character of that student, and equally in vain

Appendix K. — Reports of Vice-President and Deans of Residences.

to say that his character *may* be very good. Persons in the distance naturally believe that the Dean *ought* to know something of the character of the students—nominally, and I submit legally—committed to his care, and such persons as naturally believe that when a Dean has to say he knows nothing of the character of any student, it must be the fault of the student himself.

I have the honour to be, Sir, your obedient servant,

GEORGE WEBSTER, D.D.
Chancellor of Cork, and Dean of Residences to the Queen's College, Cork.

R. Kenny, Esq., Registrar.

REPORT of DEAN of RESIDENCES for STUDENTS of the PRESBYTERIAN CHURCH.

Sir Robert Kane.

SIR,—The Presbyterian students in attendance at the Queen's College, Cork, during the Session 1866-67, were attentive to their religious duties, and distinguished by good moral character. They prized their literary opportunities, and I believe largely profited by their studies.

I am, yours very truly,

WILLIAM MAGILL.

Cork, March 21st, 1868.

REPORT of the WESLEYAN DEAN of RESIDENCES.

Cork, 18 March, 1868.

DEAR SIR,—It gives me much pleasure to report that the conduct of the Wesleyan students in the Queen's College, Cork, so far as I have had opportunity of observing, has been extremely good, and some of the students, I am happy to say, have highly distinguished themselves in those studies.

C. L. GRANT,
Wesleyan Dean of Residences.

The Registrar of the Queen's College, Cork.

DUBLIN: Printed by ALEXANDER THOM, 87 & 88, Abbey-st
For Her Majesty's Stationery Office.

THE REPORT

OF THE

PRESIDENT

OF

QUEEN'S COLLEGE, CORK,

FOR

THE YEAR ENDING 31ST MARCH, 1869;

WITH APPENDICES A TO K INCLUSIVE.

Presented to both Houses of Parliament by Command of Her Majesty.

DUBLIN:
PRINTED BY ALEXANDER THOM, 87 & 88, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.

1869.

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THE REPORT

OF THE

PRESIDENT OF QUEEN'S COLLEGE, CORK,

FOR

THE YEAR ENDING 31ST MARCH, 1869.

TO THE QUEEN'S MOST GRACIOUS MAJESTY.

MAY IT PLEASE YOUR MAJESTY,

In compliance with the provisions of the Act of Parliament, founding the Queen's Colleges, and of the Charter of Queen's College, Cork, I have the honour to submit the following Report of the Proceedings of that College, and the Condition of its several Departments during the year terminating 31st March, 1869.

1. EXAMINATIONS FOR ENTRANCE—NUMBERS AND CLASSIFICATIONS OF STUDENTS.

The Examinations for Entrance were held in the usual manner at the commencement of the Session in October, 1868, and on subsequent days, as arranged by the College Council. The regulations to this effect are given in the Prospectus of the Session, of which a copy is annexed (Appendix A).

After those examinations 59 new Students were admitted as Matriculated Students to the First Year's Class, as were also 28 Students who had previously matriculated, but who, from not having been promoted, or from other causes, being disqualified from proceeding with the higher studies of a Senior Class, were required to re-enter the more elementary Course. The total number of Matriculated Students in the First Year's Class for the Session 1868-69 was, therefore, 87.

In addition to the above, there presented themselves to proceed with the studies of the senior years, 129 students who had passed the Sessional Examination at the close of the previous academic year. The total number of Matriculated Students in Queen's College, Cork, for the year 1868-69, was, therefore, 216.

Besides the above 216 Matriculated Students, there entered to attend the lectures of particular professors 28 Non-Matriculated Students. The total number of Students attending the College during the Session 1868-69 was, therefore, 244.

The classification of those Students by their collegiate standing

is shown in the following table, which will also show, for comparison, the corresponding numbers for the previous year.

Courses of Study in order of College standing.		Session, 1867-68.	Session, 1868-69.
Matriculated Students,	Course of First Year,	104	87
	Course of Second Year,	52	60
	Course of Third Year,	47	44
	Course of Fourth Year,	38	25
Total number of Matriculated Students,		235	216
Non-Matriculated Students,		12	28
Total number of Students,		247	244

In respect to Faculties and courses of study for Degrees and Diplomas, the Classification of the Students who attended the College during the Session (1868-69) was as follows:—

	Matriculated.	Non-Matriculated.	Total.
In the Faculty of Arts,	47	5	52
In the Faculty of Medicine,	140	16	156
In the Faculty of Law,	10	—	10
In the Faculty of Engineering,	27	7	34
Total,	224	28	252

The above number exceeds that previously given as the total number of Matriculated Students by 8, from the fact that some Students entered for the courses of more than one Faculty at the same time. There were thus entered for—

Arts and Medicine,	5
Arts and Law,	2
Arts and Engineering,	1
Total,	8

The ages of the new Students who entered for the Session 1868-69 were as follows:—

14 Years,	1	19 Years,	3
15 Years,	1	20 Years,	4
16 Years,	12	21 Years and over,	9
17 Years,	19		
18 Years,	10	Total,	59

Of the total number of Matriculated Students on the roll for the Session 1868-69, there are 147 under the age of 21 years, and 69 over that age.

2. College Examinations for Sessional Promotion of Students from the Session 1867-68, and for Scholarships in the Session 1868-69.

The Examinations for sessional promotion were held at the close of the Session 1867-68, with the following results:—

Faculty.	Promoted.	Not promoted.	Total.
Arts,	36	22	58
Law,	12	3	15
Engineering,	15	13	28
Total,	63	38	101
Fourth Year's Arts Students,			10
Faculty of Medicine,			140
Total,			251
Of which in more than one Faculty,			16
Total number of Matriculated Students,			235

Those examinations were conducted by printed papers, of which a selection is given in Appendix B, and prizes were awarded by the College Council to those Students who had been specially recommended by the examining Professors. The names of those who received such Sessional honors and prizes are given in the Appendix C.

The Examinations for Scholarships for the Session 1868-69, were carried on, as usual, under the direction of the College Council, with the following results:—

Of the 7 Senior Scholarships in Arts 6 were awarded.
Of the 30 Junior Scholarships in Arts 19 were awarded.
Of the 8 Scholarships in Medicine 8 were awarded.
Of the 3 Scholarships in Law 3 were awarded.
Of the 5 Scholarships in Engineering 4 were awarded.

The Examinations for these Scholarships were conducted principally by printed papers. The subjects of examination are prescribed in the Prospectus (Appendix A), and the more important papers of questions are given in Appendix D.

3. Courses of Instruction.

The detailed list of Classes, the number of lectures delivered by each Professor, and the number of Students attending each class are given in the Table, Appendix E. Further particulars as to the special departments will be found in the Reports of the several Professors hereto annexed, forming Appendix F.

4. Queen's University Examinations and Peel Exhibitions.

Such Students as had suitably completed their collegiate career were recommended to the Senate of the Queen's University to be examined for their respective Diplomas and Degrees. The names of those Students of Queen's College, Cork, who obtained Degrees or Diplomas at the University Examinations in June and October, 1868, and also the names of those who obtained University honors at those Examinations, are given in Appendix G.

At the close of the First University Examination in Arts in October, 1868, 7 Students from Cork College passed in Arts, of whom 2 obtained first-class honors, 2 third-class honors, and 3 were unclassed. In Engineering 5 passed, of whom 2 obtained first-class honors (1 first place), 2 third-class honors, and 1 was unclassed.

The following Exhibitions from the Peel Endowment Fund were awarded at those examinations to the following students from Queen's College, Cork:—

Michael Finucane, first, obtained £20 per year for three years.
Thomas Horan, second, obtained £10 per year for three years, as second in Mathematical Science.
Benjamin Parks, first in Engineering, obtained £20 per year for two years.

5. Competitive Examinations and Civil Service Appointments.

At the Examinations held in 1868, the following Students of Queen's College, Cork, obtained appointments in the public service by Competitive Examination:—

R. C. Bourke, Public Works Service, India.
Richard Unkles, do. do.
Henry Richards, do. do.
George J. Bourke, do. do.
Philip James Large, do. do.
Simon Exham, Royal Engineers, Woolwich.
James Chatterton, B.A., M.D., Army Medical Service. He obtained first place at first examination, and also at final examination at Nettley.
Richard A. Mowle, Naval Medical Service.
John D. Isaac, do. do.
Mr. Henry F. Cox obtained by competitive examination an appointment in the service of the Peninsular and Oriental Steam Packet Company.

6. Library and Museums.

The special Report of the Librarian will be found in Appendix H; and the condition and progress of the several parts of the Museum will be found described in the Reports of the Professors to whose departments they belong (Appendix F). In reference to the Botanic Garden, I beg leave to represent the necessity for having provided a Greenhouse or Conservatory for the preservation of such tropical or subtropical plants as are requisite for the proper illustration of the Botanical Lectures of the Professor of Natural History.

7. Financial Position of the College.

The annexed copies of the accounts furnished by the Bursar forming Appendix I, will show the financial position of the College for the year from 31st March, 1868, to 31st March, 1869.

8. Conduct and Discipline of the Students.

I have to report that the discipline of the College was very good during the greater part of the session of 1867–68, but towards its close several cases of grave violation of discipline occurred, which were promptly and energetically dealt with by the College council. The special Report of the Vice-President on discipline, and the official return of punishments by the Registrar are annexed, forming Appendix K, Nos. 1 and 2.

During the session 1868–69, from opening in October, 1868, to date of this Report, 31st March, 1869, the state of discipline has been excellent, no case requiring the notice of the College council having occurred.

With respect to the proportions of the several religious denomi-

nations among the students, the following table gives the numbers for the last and the current session.

Religious Denominations.	1867–68.			1868–69.		
	Matriculated.	Non-Matriculated.	Total.	Matriculated.	Non-Matriculated.	Total.
Roman Catholic,	107	4	111	89	8	97
Anglican,	110	8	118	107	18	125
Presbyterian,	7	–	7	11	1	12
Wesleyan,	8	–	8	6	1	7
Other Denominations,	3	–	3	3	–	3
Total,	235	12	247	216	28	244

The following table shows the religious denominations of the Students who entered the College in October, 1868, as Matriculated Students for the first time :—

Roman Catholics,	22
Anglicans,	32
Presbyterians,	4
Wesleyans,	1
Total,	59

The Reports of the Deans of Residences referring to the moral and religious conduct of the Students will be found in Appendix K, Nos. 3 and 4.

ROBERT KANE, LL.D., F.R.S.,

President of Queen's College, Cork.

26*th May*, 1869.

APPENDIX.

APPENDIX A.

Appendix A.

General Regulations of College, &c.

GENERAL REGULATIONS of the COLLEGE.—LIST of OFFICERS.—PROGRAMME of COURSES for MATRICULATION and SCHOLARSHIP.—HOURS of LECTURES.—SPECIAL COURSES for COMPETITIVE EXAMINATIONS and for the PUBLIC SERVICE.—QUEEN'S UNIVERSITY EXAMINATIONS, &c.

QUEEN'S UNIVERSITY IN IRELAND—QUEEN'S COLLEGE, CORK.

Faculties of Arts, Medicine, and Law.—Session 1869–70.

President—SIR ROBERT KANE, F.R.S., M.R.I.A.

Vice-President—JOHN RYALL, LL.D.

Professors.

The Greek Language	JOHN RYALL, LL.D.
The Latin Language	BUNNELL LEWIS, M.A., F.S.A.
Mathematics	CHARLES NIVEN, B.A.
Natural Philosophy	JOHN ENGLAND, M.A.
History and English Literature	WILLIAM RUSHTON, M.A.
Logic and Metaphysics	GEORGE SIDNEY READ, M.A.
Chemistry	JOHN BLYTH, M.D.
Natural History	JOSEPH REAY GREENE, B.A., M.D.
Geology and Mineralogy	ROBERT HARKNESS, F.R.S.S.L. & E., F.G.S.
Modern Languages	RAYMOND DE VERICOUR, M.A.
Jurisprudence and Political Economy	RICHARD HORNER MILLS, M.A.
English Law	MICHAEL BARRY, M.R.I.A.
Anatomy and Physiology	J. HENRY CORBETT, M.D., L.R.C.S.I.
Medicine	DENIS C. O'CONNOR, B.A., M.D.
Surgery	WILLIAM K. TANNER, M.D., F.& L.R.C.S.I.
Materia Medica	PURCELL O'LEARY, B. es L., M.A., M.D., F.B.S.
Midwifery	JOSHUA R. HARVEY, B.A., M.D.
Engineering	ALEXANDER JACK, M.A.
Celtic Languages	OWEN CONNELLAN, Esq.

Officers.

Registrar	ROBERT JOHN KENNY, Esq.
Bursar	EDWARD M. FITZGERALD, Esq.
Librarian	MATTHIAS O'KEEFFE, M.A., M.D.

The College Session, 1869–70.

The *First Term* will commence on the 19th of October, 1869, and end on the 18th of December.

The *Second Term* will commence on the 3rd of January, 1870, and end on the 9th of April.

The *Third Term* will commence on the 25th of April, 1870, and end with the Session, on the 11th of June.

Appendix A.

General Regulations of College, &c.

Subjects of the Matriculation Examinations.

For the Faculties of Arts, Medicine, and Law.

Greek:

Grammar.

Any one of the following Authors which the Candidate may select:—

Homer—Iliad, Books I. and II.
Xenophon—Anabasis, Books I. and II.
Lucian—Walker's Selections.

Latin:

Any one of the following Authors which the Candidate may select:—

Virgil—Æneid, Books I. and II.
Sallust—Conspiracy of Catiline.
Cæsar—Gallic War, Book I.

English:

Grammar—

(1.) The principles of Etymology and Orthography.
(2.) The leading Rules of Syntax.

Composition, and writing from dictation.

Outlines of Grecian History to the death of Alexander the Great.
Outlines of Roman History to the accession of Augustus.
Outlines of Ancient and Modern Geography.

Mathematics:

Arithmetic—Principles of Notation. Vulgar and Decimal Fractions. Definition of the terms, Ratio and Proportion. The Rule of Proportion, with its commercial applications, including Simple Interest.
Algebra—Explanation of the signs and meaning of an Index. Calculation of the values of Algebraical Expressions, when particular values are given to the letters which they involve.
Euclid—Book I., with the definitions and axioms.

N.B.—The Easter Recess for the Medical Faculty will commence on the Tuesday before Easter, and end on Easter Monday.

For the Department of Civil Engineering.

The outlines of Modern Geography; Grammar.

Mathematics—Arithmetic, Principles of Notation, Vulgar and Decimal Fractions, with the reasons of the different rules. Rule of Proportion, with its commercial applications; Extraction of the Square Root, both of whole numbers and decimals.
Algebra—Explanation of the signs and meaning of an Index, calculation of the value of Algebraic expressions, when particular values are given to the letters which they involve.
Euclid—Books I., II., III., IV., and VI., with the definitions of Book V.

Matriculated Students.

Persons intending to become *Matriculated* Students of the College, in any of the Faculties or Departments of Faculty, are required to pass the Matriculation Examination, whereby they are declared competent to pursue the course of study prescribed to Students in that Faculty or Department of Faculty, and, on completing this course, are entitled to become Candidates for the Degrees or Diplomas granted by the Queen's University in Ireland.

The Examination for the Matriculation *of Students in the several Faculties and Departments of Faculty, will commence at Ten o'clock, on Tuesday, the 19th of October*, 1869.

Candidates for Matriculation are required to forward their names to the Registrar of the College, and to state the Faculty or Department of Faculty for which

they propose to matriculate, at least *three days* before the commencement of Matriculation Examinations. *Appendix A.*

Each Candidate, before being admitted to the Matriculation Examination, is required to pay the Bursar of the College the *College Fees* for the year, amounting to 10*s.* for each Faculty or Department of Faculty. These fees will be returned to such Candidates as may fail in passing the Matriculation Examination. General Regulations of College, &c.

After passing the Matriculation Examination, and before receiving a Certificate thereof, or joining the several Classes, each Student is required to pay the Bursar of the College the whole of the *Class Fees* for the Session.

The Lectures in Arts and Engineering commence October 25th, and those in Medicine, November 2nd.

One moiety of the *Class Fees* for the Session is returned to Junior Scholars; but this exemption is not to extend to the Fees of any Honor Lectures attended by them out of the order of studies laid down in the Curriculum.

In order to encourage the study of French by Candidates for Matriculation, a prize of £5 will be offered for competition in that language, to such Students as, at the opening of Session 1869–70, shall have passed the Matriculation Examination for the first time.

Matriculated Students are required to wear an academic dress.

In May and June are held General Examinations in the subjects lectured upon during the Session; and a sum of One Hundred Pounds is awarded in Prizes to the most distinguished Students.

Students who have pursued part of their studies in any one of the Queen's Colleges, or in any University capable of granting Degrees in the several Faculties of Arts, Law, and Medicine, are permitted, on passing the prescribed Examinations, and producing testimonials of their College standing and conduct, to take corresponding rank in this College, and also to compete for Scholarships of the corresponding year; providing they shall not hold at the same time a Scholarship or other office of emolument in any University or College of a University.

University Prizes.

Two Prizes for English Prose Composition, and two for Geometry, have been founded in each of the Queen's Colleges, to be awarded annually at entrance—First Prize for English Prose Composition, £3 worth of Books; Second ditto, £2 worth of Books. First Prize for Geometry,* £3 worth of Books; Second ditto, £2 worth of Books.

Non-Matriculated Students.

Gentlemen who do not propose, or are not prepared, to matriculate, but who wish to avail themselves, in other respects, of the advantages offered by the College, are permitted to attend the Professors' Lectures, without passing any of the Examinations, on paying to the Bursar the regulated Class Fees, amounting generally to £2 for each course, and College Fee of 5*s.* for the Session; but they cannot become Candidates for Scholarships or Prizes, or enjoy the other privileges of Matriculated Students. They are, however, entitled to the use of the Library, on subscribing the Library Regulations, and paying a fee of 15*s.* for each Session; and the Professors are authorized to recommend to the Council to grant Certificates of Honor to the most distinguished of them in their respective Classes.

East India Civil Service.

The attention of parents and guardians is directed to the new arrangements for the East India Civil Service; according to which Writerships are open to competition at Examinations prescribed by the Board of Control. The course of Lectures in the Queen's College, Cork, are well adapted to prepare Candidates for this Examination, which includes the following branches of knowledge, their relative importance being indicated by the annexed scale of marks.

* 1st, 2nd, 3rd, 4th, and 6th Books of Euclid, with Deductions, together with the Definitions of the 5th Book.

Appendix A.

General Regulations of College, &c.

English Language and Literature:

Composition,	50
English Literature and History, including that of the Laws and Constitution,	1,000
	1,500
Language, Literature, and History of Greece,	750
,, ,, ,, Rome,	750
,, ,, ,, France,	375
,, ,, ,, Germany,	375
,, ,, ,, Italy,	375
Mathematics, pure and mixed,	1,250
Natural Sciences—that is, Chemistry, Electricity, and Magnetism, Natural History, Geology, and Mineralogy,	500
*** No candidate will be allowed to be examined in more than three of the branches of knowledge included under this head, and the total (500) may be obtained by adequate proficiency in any three.	
Moral Science—that is, Logic, Mental and Moral Philosophy,	500
Sanscrit Language and Literature,	375
Arabic Language and Literature,	375
	7,125

Library and Museum.

The Library and Museum are open, under certain regulations, to all the Students.

Faculty of Arts.

Lectures.

The Lectures of the several Professors in this Faculty will commence on Monday, the 25th of October, 1869, except those on the "English Language" and on "Logic," which will not be delivered until the commencement of the Second Term.

Scholarships.

The Examinations for Scholarships will commence on Thursday, the 21st of October.* The College Council are empowered to confer, at these Examinations, Eight Senior Scholarships of the value of £40 each, and Forty-six Junior Scholarships, viz.:—Fifteen in Literature, and Fifteen in Science, of the value of £24 each; Eight in Medicine, value £25 each; Three in Law, and Five in Civil Engineering, of the value of £20 each—and if competent Candidates present themselves, these Scholarships will be awarded to the most deserving. The Scholarships are tenable for one year only, except the Second Year's Scholarships in Arts, which are tenable for two years, on condition that the Scholar shall pass with Honors the "First University Examination," and shall attend, during the third Session, at least two of the Courses of Lectures prescribed by the University for attendance during that Session, as a qualification for the Degree of B.A., and shall pass the Sessional Examinations in these subjects; but the Scholars of each year are, at its expiration, eligible to become Candidates for the Scholarships of the succeeding year. A Scholarship, however, of the same year in the same Faculty, cannot be held twice by the same Student.

The Scholarships of the first year are open to all Students of the respective Faculties who have passed the Matriculation Examination. Those of the second and fourth years in Arts and those of second, third, and fourth years in Medi-

* See Programme of Scholarship Examinations, page 16.

cine and Law, and of the second and third in Engineering, are open to all Students who have passed the Examinations, and attended the Lectures prescribed in the preceding part of their Course of Study.

If any Student be placed, at the Examination for Junior Literary and Science Scholarships, first on both the lists of Candidates, he will be entitled to a Scholarship of each Division; but in no other case will the same Student be permitted to hold two Scholarships.

No Student is entitled to become a Candidate for a Scholarship, or Exhibition, unless he shall have paid, on or before the day previous to the Examination, the COLLEGE AND CLASS *Fees for the current Session, and procured a Certificate to that effect from the Bursar.**

The Scholarship and Exhibition endowments are paid by Quarterly Instalments, and their tenure is dependent on the performance (so far as required by the Council) of the duties prescribed by the Statutes. These duties are, to take charge of the Class-Rolls, to Register the attendance of the Students, to assist the Professors, &c.

If the Scholar or Exhibitioner be not obedient to the orders of the Council, be removed from the College, or, by non-attendance on Lectures, fail to keep the terms required for promotion, he forfeits his Scholarship or Exhibition.

The Scholar in the Faculty of Medicine must attend, during the year of his appointment, the classes recommended for his year of study in the order of the following Curriculum:—

FIRST YEAR.	THIRD YEAR.
Anatomy and Physiology.	Surgery.
Chemistry.	Midwifery.
French or German.	Practical Anatomy.
Natural Philosophy.	
Zoology and Botany.	
SECOND YEAR.	**FOURTH YEAR.**
Anatomy and Physiology.	Practice of Medicine.
Materia Medica.	Medical Jurisprudence.
Practical Anatomy.	
Practical Chemistry.	

JUNIOR SCHOLARSHIPS.

Subjects of Examination for Literary Scholarships of the First Year.

The Greek Language:

Homer—The Iliad, Books I., II., III., IV., V., and VI.
Euripides—Phœnissæ.
Herodotus—The Second Book.
Xenophon—The Anabasis, Books I., II., III.
Lucian—Walker's Selections.
Greek Prose—Re-translation of short sentences from English into Greek.

The Latin Language:

Virgil—First six Books of the Æneid, the Georgics.
Horace—First two Books of the Odes, the Satires, and the Epistles, Books I., II.
Cicero—De Senectute, De Amicitiâ.
Sallust—Conspiracy of Catiline, and Jugurthine War.
Cæsar—The Gallic War, Books V., VI.
Latin Prose—Re-translations from English into Latin, of portions of Cicero.

N.B.—The Examination in Greek and Latin will be conducted partly *vivâ voce*, and partly by printed questions.

The English Language:

Original Essays on subjects proposed by the Examiner. The Principles of English Grammar. The Laws of Etymology and Orthography. Craik's Outlines of the History of the English Language.

History and Geography:

Grecian History to the Death of Alexander the Great.
Roman History to the Accession of Augustus.
Outlines of Ancient and Modern Geography.

* This rule applies only to such candidates as have previously attended any course of instruction in any University capable of granting Degrees.

Appendix A.

General Regulations of College, &c.

Subjects of Examination for Literary Scholarships of the Second and Third Years.

The Greek Language:

Homer—Iliad, Books XI. to XIV. inclusive.
Sophocles—Œdipus Coloneus.
Thucydides—Book I., Chapters 1 to 60 inclusive.
Prose composition.

The Latin Language:

Virgil—Eclogues and Æneid.
Horace.
Terence—Heauton Timorumenos.
Cicero—Tusculan Disputations.
„ De Oratore.
Juvenal—Satires, I., III., VIII., X. XIII., XIV.
Livy—Book IV.
Tacitus—Histories, Book I.

Composition in prose and verse.

The English Language:

Craik's Outlines of the History of the English Language.
History of English Literature. Text-book, Chambers' Cyclopædia of English Literature, Vol. I., pp. 85–145.
Shakespeare's Julius Cæsar.
„ King John.

The French Language:

Molière—L'Avare; Le Misanthrope.
Lafontaine—Fables.
Histoire de la Littérature Française, par Demogeot.
Translation from English into French.

Subjects of Examination for Science Scholarships of the First Year.

Arithmetic:

Mensuration of rectilineal figures and of the circle.

Algebra:

The Solution of Simple and Quadratic Equations with one or more unknown quantities. Easy questions in the application of Algebra to Geometry. Arithmetical and Geometrical Progressions. The nature of Logarithms.

Euclid:

Books I., II., III., and IV., with deductions.

Trigonometry:

Definitions of the Sine, Tangent, &c., of an angle. The easier analytical formulæ. The Solution of Plane Triangles, with demonstrations. Nature and Use of the Tables.

Subjects of Examination for Science Scholarships of the Second and Third Years.

The Higher Arithmetic, with Mensuration:

Algebra:

The Solution of Equations with one or more unknown quantities. Elimination. Theory and use of Logarithms. Theory of Equations. Binomial and Exponential Theorems. Compound Interest and Annuities.

Geometry:

Euclid, Books I., II., III., IV., VI., with deductions. Analytical Geometry.

Trigonometry:

The Solution of Plane Triangles, with demonstrations of the formulæ. Theorems relating to single arcs. Theorems relating to the sums and differences of arcs. Application to heights and distances.

Subjects of Examination for Engineering Scholarships of the First Year.

Arithmetic:
Mensuration:
Algebra:
Euclid:
Trigonometry:
} As for Science Scholarships of the First Year.

Subjects of Examination for Engineering Scholarships of the Second Year.

Mathematics:

The same as for Science Scholarships of the Second Year, except that Spherical Trigonometry will be substituted for Analytical Geometry.

French:

Demogeot—Histoire de la Littérature Française.
Translation from English into French.

Chemistry:

Laws of Combination and Affinity—Preparation and Properties of the Chief Organic Substances—Metallurgic Operations—Mortars and Cements.

Geometrical Drawing:

Descriptive Geometry—Orthographic Projection—Isometric Projection—Perspective—Geometry of Oblique Bridge.

Subjects of Examination for Engineering Scholarship of the Third Year.

Mathematics:

Algebra—Theory of Equations and Methods of Approximation. Elimination. Summation of Series. Binomial and Exponential Theorems. Scales of Notation, &c.

Trigonometry—Plane and Spherical, with Astronomical applications.

Analytical Geometry, and Geometrical Conic Sections.

Differential Calculus—involving demonstrations of the rules for differentiating Algebraic, Circular, and Exponential Functions, founded upon a clear statement of the nature of Limits and Definition of a Differential coefficient. Taylor's and Maclaurin's Theorems. Maxima and Minima. Criteria of the same, with proofs, Equation of Tangent, Normal, Evolute, &c.

Integral Calculus, including more particularly Rational Fractions, Binomial Differentials, Areas of Curves, Rectification of Curves, Cubature of Solids of Revolution.

Natural Philosophy:

Newth's Mechanics.
Ganôt—Traite de Physique—Books VI., VII., VIII., IX.

Geology and Mineralogy:

Civil Engineering:

Instruments used by the Civil Engineer. Their Adjustments and use. Surveying. Levelling.

Senior Scholarships.

Seven Senior Scholarships are appropriated to the Faculty of Arts, for proficiency in Special Departments of Study, and will be conferred, by examination, on the most deserving of the Graduates of the Queen's University, in the Faculty of Arts, of less than two years' standing.

One in Ancient Languages, Literature, and History of Ancient Greece and Rome.

One to Modern Languages, Literature, and History, viz., English Language, Literature, and Composition; European and English History; the French Language, with German or Italian.

One to Mental and Social Science, viz., Logic, Metaphysics, and Political Economy.

One to Mathematics, viz., Pure Mathematics.

One to Natural Philosophy, viz., Experimental Physics, and Mixed Mathematics.

One to Chemistry, viz., Theoretical and Practical Chemistry.

One to Natural History, viz., Zoology and Botany, Geology, and Physical Geography.

*** For Senior Scholarship in Law, see page 26.

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SUBJECTS OF EXAMINATION

For the Senior Scholarships in the Greek and Latin Languages, and Ancient History.

The Greek Language:

Æschines—Contra Ctesiphontem.
Together with the subjects for the B.A. Honor Examination at the University.
Composition in Attic Prose and Iambic Verse.
Greek Literature and History.

The Latin Language:

Virgil.
Horace.
Lucretius, Books I., II.
Ovid—Fasti, Book I.
Persius.
Terence—Andria and Heauton Timorumenos.
Plautus—Capteivei and Pseudolus.
Cicero—De Oratore.
,, Tusculan Disputations.
,, Ad Atticum, Books I., II.
,, Actiones Verrinæ.
Livy—Books IV. and XXII.
Tacitus—The Annals, Books I. to IV., inclusive.

Composition in Prose and Verse.

For Senior Scholarships in Modern Languages and History.

The French Language:

Lavallée—Histoire des Français.
Histoire de la Littérature Française, par Demogeot ou Nisard.

The German Language:

National-Literatur, von A. F. Vilmar.
Schiller's Maria Stuart.
Goethe's Ephigenie.

Translation from English into one of the above Languages.

English:

Language, Literature, and Composition.
History—Hallam's Middle Ages.
Chap. II., Part 1, The Feudal System.
Chap. VIII., Part 1, The Anglo-Saxon Constitution.
Chap. VIII., Part 2, The Anglo-Norman Constitution.
Chap. VIII., Part 3, The English Constitution.

The Italian Language:

Tasso—Gerusalemme Liberata—first five Cantos.
Dante's Inferno—Italian Literature, published by Messrs. Chambers.
Translation from English into French, German, or Italian.

For the Senior Scholarship in Mathematics.

The subjects of previous Examinations (for which see page 14), with the following additions:—

Analytical Geometry of Three Dimensions.
Differential Equations.

For the Senior Scholarship in Natural Philosophy.

Duhamel—Mécanique.
Brinkley—Elements of Astronomy, including the Appendix.
Parkinson's Optics.

For the Senior Scholarship in Mental and Social Sciences.

The subjects discussed in the Lectures of the Professors, with the following additions:—

Metaphysics and Logic:

Sir William Hamilton's Philosophical Essays and Notes on Reid.
Mill—System of Logic, Book III. to the end of Volume I.

Political Economy:

Principles of Political Economy, by John Stuart Mill.
Taxation and Funding, by M'Culloch—third edition, 1863.

The value attached to the subjects will be in the following proportions, viz:—

Metaphysics and Logic,	60
Political Economy,	40

For the Senior Scholarship in Chemistry.

Chemical Physics (in Miller's Chemistry).

Inorganic Chemistry:

General principles of Chemical Philosophy. Crystallography. Chemistry of the Metals. Constitution of Salts. Metallurgy.

Organic Chemistry:

Ultimate analysis of Organic Bodies. Empirical and Rational formulæ. Determination of the density of Vapours. Law of Substitution. Homologous Series. Chemical Types. Gerhardt's Views. Preparation and Properties of the Alcohol Series and their Derivatives. Cyanogen, its Compounds and Derivatives. Organic Bases of Artificial Origin.

Practical Chemistry:

The Analysis of Mixtures, containing two or more Acids and Bases.

For the Senior Scholarship in Natural Science.

The Lectures of the Professors.
Huxley—Elements of Comparative Anatomy.
Mill's Logic, Book IV.
Lyell's Elements and Principles.

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1. COURSE FOR THE DEGREE OF BACHELOR IN ARTS.*

Candidates for the Degree of Bachelor in Arts are required—

1. To have been admitted Matriculated Students of the Queen's University in the Faculty of Arts.
2. To have subsequently studied in one of the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examinations herein prescribed.

The Course for the Degree of Bachelor in Arts shall extend over three Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

English (One Term).
Greek.
Latin.
A Modern Continental Language.
Mathematics (First Course).

SECOND SESSION.

Logic (One Term).
Natural Philosophy.

Along with any two of the following:—

Greek (Second Course).
Latin (Second Course).
Modern Continental Languages (Second Course).
Mathematics (Second Course).

THIRD SESSION.

English Language and Literature.
Metaphysics, or History, or Political Economy (Two Terms).
Chemistry.
Zoology, or Botany.

Attendance on these Courses shall, in all cases, be understood to include passing such examinations as may be appointed by the College Council, and the catechetical parts of the Courses of Lectures.

Candidates for the Degree of Bachelor in Arts shall reside at their respective Colleges during at least the first two terms of each Session, but may be exempted from residence during the third term by a special grace of the College Council.

Third year's Students may substitute attendance on one or on two Courses of Honor Lectures, for a like number of the Courses above set down for study in the third Session.

* His Royal Highness the Commander-in-Chief has approved of Graduates of the Queen's University being in future exempted from the usual Examination for direct Commissions; and also of the First University Examination being accepted in lieu of that for the Royal Military College, Sandhurst.

Appendix A.

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Candidates for the Degree of Bachelor in Arts shall pass two University Examinations—a Preliminary and a Degree Examination.

The Course for the Preliminary Examination shall include Greek, Latin, a Modern Continental Language, and Mathematical Science. Students who have completed their second Session must pass this Examination before rising to the third year, unless prevented by illness or other inevitable accident, in which case the Senate may admit them to a Supplementary Examination.

Candidates who have completed the Undergraduate Course, may offer themselves at the Degree Examination for graduation either with Honors or without Honors.

If they seek to graduate with Honors, they may select for their Examination any one of the following groups:—

Greek and Latin.
Modern Continental Languages.
Mathematical Science.
Experimental Science.
Natural Science.

Or any three of the following:—

English Language and Literature.
Metaphysics.
History.
Political Economy.
Logic.

Candidates who seek the Degree without Honors, may select for their Examination any group of the subjects from the following list, provided the sum of the numbers attached in this list to the selected subjects be at least four:—

English Language and Literature,	2	Latin,	1
Mathematical Science,	2	Each Modern Continental Language,	1
Experimental Physics,	2	Logic,	1
Chemistry,	2	Metaphysics,	1
Zoology,	1	History,	1
Botany,	1	Political Economy,	1
Greek,	1		

English Composition will form a part of all University Examinations.

2. Course for the Degree of Master in Arts.

Bachelors in Arts of one year's standing, may offer themselves for Examination for the Degree of Master in Arts, and may select for their Examination any one of the following groups:—

Greek and Latin.
Modern Continental Languages.
Mathematical Science.
Experimental Science.
Natural Science.

Or any three of the following:—

English Language and Literature.
Metaphysics.
History.
Political Economy.
Logic.

This Ordinance supersedes former Ordinances prescribing the curriculum for the Degree of Master in Arts.

3. Course for the Diploma of Licentiate in Arts.

A Diploma conferring the title of Licentiate in Arts of the Queen's University in Ireland, shall be granted to Candidates who comply with the following regulations:—

Candidates for this Diploma are required—

1. To have matriculated in the Queen's University.
2. To have pursued in one of the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examination herein prescribed.

The Course for the Diploma of Licentiate in Arts shall extend over two Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

Two Languages, of which one may be English.
Mathematics.
Another Course on any subject in the annexed list.

SECOND SESSION.

Greek, Latin, or a Modern Continental Language.
Logic (One Term).
Natural Philosophy.
And two other Courses on subjects in the annexed list.

If any of the Courses, except that on Logic, extend over one Term only, some other Course from the annexed list must be attended as a supplement to it, but not necessarily in the same Session.

Credit will not be given for attending the same Course of Lectures a second time.

Attendance on the Courses shall, in all cases, be understood to include passing such Examinations as the College Council shall appoint, and the catechetical parts of the Courses of Lectures.

Candidates for the Diploma of Licentiate in Arts shall reside at their respective Colleges during at least the first two terms of each Session.

After having completed the above curriculum, Candidates for the Diploma shall pass a University Examination in Greek, Latin, or a Modern Continental Language; in Mathematical Science; and in two other subjects selected from the annexed list, viz.:—

The Mathematical Sciences.
The Experimental Sciences.
The Natural Sciences.
Geometrical Drawing.
Mensuration, Levelling, and Mapping.
Anatomy and Physiology.
English Language and Literature.
The Modern Continental Languages.
Greek.
Latin.
Logic.
Metaphysics.
History.
Political Economy.

English Composition will form a part of all University Examinations.

Licentiates in Arts who may desire to proceed to the Degree of Bachelor in Arts, may enter directly on the second Session in the Course for this Degree, provided they attend in it, instead of the usual curriculum, all the Courses prescribed for the first two years which they shall not have already attended in the curriculum for the Diploma of Licentiate.*

University Prizes.

University Exhibitions in the Faculty of Arts.

Three Exhibitions of £20 a year for three years, three Exhibitions of £15 a year for three years, and two Exhibitions of £10 a year for three years, will be competed for annually in the Faculty of Arts. The three £20 Exhibitions will be awarded to the Candidates who stand foremost in order of merit from each College, at the first University Examination in Arts; and the three £15 Exhibitions to the Candidates who stand second in order of merit from each College: provided that their names appear in the First Class of the Division List at that Examination. Of the two £10 Exhibitions, one will be awarded to the best answerer in Mathematical Science, and the other to the best answerer

* Note.—Degrees in Arts, conferred by the Queen's University in Ireland, are recognised by the University of Durham, by St. Bee's College, Whitehaven, and by St. Aidan's College, Birkenhead, in the case of Theological Students preparing for Holy Orders in the Established Church.

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in the Ancient Classics, at the first University Examination. The £10 Exhibitions are open to the competition of Candidates from all the Colleges, and may be held along with one of the larger Exhibitions.

Each Candidate will be deemed a Student of that College in which he shall have attended the Lectures of the second Session; and no Student will be admitted to the competition who shall have allowed more than one academic year to intervene between the time that he entered upon the studies of the second Session and the time of competition.

The first instalment of each Exhibition will be paid at the time of competition; the second when the Exhibitioner takes the Degree of B.A. in the Queen's University, provided he graduate with honors, and within two academic years; and the third when he takes the Degree of M.A. in the Queen's University, provided he obtain it within three academic years from the time of competition.

University Prizes in Composition, open to the Competition of Graduates and Undergraduates.

Two Prizes for English Prose Composition, one of £10 worth of Books, and the other of £5 worth of Books, have been founded, and are open to the competition of all members of the University who shall not have been graduates for more than three years at the time of competition, and who shall not have already twice obtained one or other of these Prizes.

University Prizes in Composition, open to the Competition of all Undergraduates.

Two Prizes in Composition, one for English Prose, the other for Greek or Latin Prose, and each consisting of £5 worth of Books, have been founded, and are open to the competition of all undergraduates, provided that neither the English nor the Classical Prize be awarded oftener than twice to any Student.

Diploma in Engineering.

Each Candidate for the Diploma in Civil Engineering is required—

1. To have been admitted a Matriculated Student of the Queen's University in the Department of Civil Engineering.
2. To have studied in the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examinations herein prescribed.

The Course for the Diploma in Civil Engineering shall usually extend over Three Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

Mathematics (First Course).
Chemistry.
Modern Languages.
Geometrical Drawing.
Office Work.
Mineralogy, Geology, and Physical Geography.

SECOND SESSION.

Mathematics (Second Course).
Experimental Physics.
Civil Engineering.
Office Work.
Field Work.

THIRD SESSION.

Natural Philosophy, applied.
Mathematical Physics.
Civil and Mechanical Engineering.
Office Work.
Field Work.
Engineering Excursions.

Attendance on these Courses shall in all cases be understood to include passing such Examinations as may be appointed by the College Council, as well as the catechetical parts of the Courses of the Lecture.

Engineering Students shall reside at their respective Colleges during at least the first two Terms of each Session, and can be exempted from residence during the third Term also, only by a special grace of the College Council.

The study of the Engineering Curriculum may be extended over more than three Sessions, on the recommendation of the College Council, and under such regulations as the Council shall impose. Some relaxation of the order in which the subjects shall be studied will also be admitted, on the recommendation of the Council.

Candidates will, on the special recommendation of the College Council, be admitted to the Diploma after two years' residence instead of three, if their previous acquaintance with a sufficient group of the subjects above set down for study in the First and Second Session is deemed by the Council satisfactory. In such cases the Certificate of the Council will be accepted in lieu of attendances upon these Courses, but will not exempt Candidates from the University Examinations in them.

In order to obtain this Certificate, Students must have attended previously at least one Session in Arts, or one year in an Engineer's office. On making application to the Council, such Students will be allowed to present themselves, at the time of Matriculation, for examination in the subjects of any four of the eight Courses of Lectures of the first two years. On passing this Examination, they will be allowed to take rank at once as Students of the second year, and will then be required to attend those other four Courses of Lectures only, in the subjects of which they have not passed; but they will not be eligible for the Scholarship of that year.

The application to be admitted to this Examination must be lodged with the Registrar before the first day of the Session, and must state what are the four subjects in which the Students propose to offer themselves for Examination, and must be accompanied by a Certificate of the required attendance of one or more years in Arts or an Engineer's Office.

On passing the Sessional Examinations in the subjects of these four Courses of Lectures which they shall have attended as Students of the second year, they will be promoted to the rank of Students of the third year; and, on completing the regular Course of that year, will be furnished with the Certificate required by the Senate of the University.

The University Examinations shall extend to all the subjects of the above Curriculum. French will, in all cases, be required.

Candidates must present themselves before the close of their Collegiate Course for Examination in the following subjects, viz.:—Mathematics (*First Course*); Experimental Physics; Modern Languages; Geometrical Drawing (including Orthographic projection, Isometric projection, Descriptive Geometry, and Linear Perspective); Mathematics (*Second Course*); Mensuration, Levelling, and Mapping.

The final Examination shall extend to all the subjects of the Engineering Course, in which the Candidate shall not have previously passed. English Composition will form a part of each University Examination.

This Ordinance shall take effect from the first day of January, 1860; Students who shall have entered the Engineering Schools of the Colleges of Queen's University previously, may proceed either under the present Ordinance, or under that hitherto in force.

Exhibitions in the School of Engineering.

Two Exhibitions, one of £20 a year for two years, and the other of £15 a year for two years, will be competed for annually in the School of Engineering. These Exhibitions will be awarded at the first University Examination in Engineering: the £20 Exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated, and the £15 Exhibition to the Candidate who is first in order of merit of the competitors from the other two Colleges: provided that their names appear in the First Class of the Division List at that Examination.

Each Candidate will be deemed a Student of that College in which he shall have attended the Lectures of the second Session; and no Student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

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The first instalment of each Exhibition will be paid at the time of competition; the other when the Exhibitioner takes the Diploma in Engineering of the Queen's University, provided that he take honors with it, and obtain it within two academic years from the time of competition.

Faculty of Medicine.

Lectures, &c.

The Medical Session will be opened on Tuesday, 2nd of November, 1869, and the Courses of Lectures will commence as under:—

Anatomy and Physiology—Tuesday, 2nd November, at One o'clock, to be continued daily, except on Saturdays, at the same hour.

Practice of Medicine—Wednesday, 3rd November, at Three o'clock, to be continued on Mondays, Wednesdays, and Fridays, at the same hour.

Practice of Surgery—Tuesday, 2nd November, at Four o'clock, to be continued on Tuesdays and Thursdays, at Four o'clock, and Saturdays, at One o'clock.

Materia Medica—Tuesday, 2nd November, at Three o'clock, to be continued on Tuesdays and Thursdays, at Three o'clock; and on Saturdays, at Twelve o'clock.

Medical Jurisprudence—Tuesday, 2nd November, at Twelve o'clock, to be continued on Tuesdays and Thursdays, at the same hour, and on Fridays at One o'clock.

Midwifery—Wednesday, 3rd November, at Four o'clock, to be continued on Mondays, Wednesdays, and Fridays, at the same hour.

The Course of Practical Anatomy will be conducted by the Professor of Anatomy and Physiology, assisted by Dr. Shinkwin and Dr. H. M. Jones, Demonstrators.

The Anatomical Demonstrations will commence on 3rd of November, and be continued daily at Twelve o'clock, except Saturdays.

Chemistry—Monday, Wednesday, and Friday, at Two o'clock.

Practical Chemistry—Monday, Tuesday, Wednesday, Thursday, and Friday.

Zoology and Botany—Monday, Wednesday, and Friday.

Natural Philosophy—Tuesdays and Thursdays.

Modern Languages—Monday, Wednesday, and Friday.

Subjects of Examination for Medical Scholarships of the First Year.

The Scholarships of the First year in the Faculty of Medicine will be awarded thus:—One to the Candidate who shall have most distinguished himself at the Examination in the course prescribed for Science Scholarships of the First year in Arts, and one to the Candidate who shall have most distinguished himself at the Examination in the course prescribed for Literary Scholarships of the First year in Arts. Candidates for these Scholarships shall have previously declared themselves, and have matriculated as Medical Students. It is left to their option for which of them they will compete.

Subjects of Examination for Medical Scholarships of the Second Year.

Anatomy and Physiology.	General Physics.
Chemistry.	Zoology and Botany.

The French Language.

Subjects of Examination for Medical Scholarships of the Third Year.

Anatomy and Physiology.	Materia Medica.
Practical Anatomy.	Practical Chemistry.

Subjects of Examination for Medical Scholarships of the Fourth Year.

Anatomy and Physiology.	Pathology and Morbid Anatomy.
Practical Anatomy.	Surgery.
Therapeutics.	Midwifery.

Note.—The 17th of November will be the last day for entering for the Six Months' Courses of Lectures in the above Curriculum. All the Lectures are recognised by the Queen's University in Ireland, by the Universities of London, Glasgow, Aberdeen, and St. Andrew's; the Colleges of Surgeons of Dublin, Edinburgh, and London; by the Apothecaries' Companies, by the Army, Navy, and East India Medical Boards, &c., &c.

Degrees of M.D. and M.Ch.*

General Regulations of College, &c.

Each Candidate for the Degree of Doctor in Medicine or Master in Surgery is required—

1st.—To have passed in one of the Colleges of the Queen's University the Entrance Examination in Arts, and to have been admitted a Matriculated Student of the University.

2nd.—To have attended in one of the Queen's Colleges, Lectures on one Modern Continental Language for six months, and Lectures on Natural Philosophy for six months.

3rd.—To have also attended, in some one of the Queen's Colleges, at least two of the courses of Lectures marked with an asterisk. For the remainder of the courses, authenticated certificates will be received from the Professors or Lecturers in Universities, Colleges, or Schools, recognised by the Senate of the Queen's University in Ireland.

4th.—To pass two University Examinations—the First University Examination, and the Degree Examination.

The Curriculum shall extend over at least four years, and shall be divided into periods of at least two years each.

Candidates are recommended to pass the Matriculation Examination, prior to entering on the second period.

It is recommended that the first period shall comprise attendance on the following Courses of Medical Lectures:—

* Chemistry.
* Botany, with Herborizations for practical study, and Zoology.
* Anatomy and Physiology.
* Practical Anatomy.
* Materia Medica and Pharmacy.

And that the second period shall comprise attendance on the following Courses of Medical Lectures:—

Anatomy and Physiology (Second Course).
Practical Anatomy (Second Course).
* Theory and Practice of Surgery.
* Midwifery.
* Theory and Practice of Medicine.
* Medical Jurisprudence.

In addition to the above Courses of Lectures, Candidates shall have attended during either the first or second period—

A Modern Continental Language (in one of the Colleges of the University).
Experimental Physics (in one of the Colleges of the University).

Also, during the first period—

Practical Chemistry (in a recognised Laboratory).
Medico-Chirurgical Hospital (recognised by the Senate) containing at least sixty beds, together with the Clinical Lectures therein delivered, at least Two each Week—a Winter Session of Six Months.

And during the second period—

Practical Midwifery, at a recognised Midwifery Hospital, with the Clinical Lectures therein delivered—for a period of Three Months, in an Hospital containing not less than Thirty beds; or six Months, in an Hospital containing not less than Fifteen beds.

Medico-Chirurgical Hospital (recognised by the Senate) containing at least sixty beds, together with the Clinical Lectures therein delivered—Eighteen Months; including either three Winter Sessions of Six Months each, or two Winter Sessions of Six Months each, and two Summer Sessions of Three Months each.

Medical Examinations are held in June, and in September and October.

The June Examinations are Pass Examinations, and commence on the Tuesday following the Second Saturday in June.

* The regulations under which degrees in Surgery will be conferred on Candidates who graduated in Medicine before the year 1865, may be learned on application to the Secretary of the Queen's University.

Appendix A.

General Regulations of College, &c.

The Honor Examinations commence on the last Tuesday in September, and are followed by Pass Examinations.

Each Candidate for Examination in June must forward to the Secretary, on or before the first of June, notice of his intention to offer himself as a Candidate, along with his Certificates; and each Candidate for Examination in September or October must forward similar notice, along with his certificates.

Exhibitions in the Faculty of Medicine.

Two exhibitions, one consisting of two instalments of £20 each, and the other of two instalments of £15 each, will be competed for annually in the Faculty of Medicine. These exhibitions will be awarded for proficiency in the non-professional part of the first University Examination in Medicine: the £20 exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated; and the £15 exhibition to the candidate who is first in order of merit of the competitors from the other two colleges; provided that their names appear in the First Class of the Division List at that examination.

Each Candidate will be deemed a student of that College in which he shall have attended the Lectures of the second session; and no student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

The exhibitions in Medicine will be paid in two equal instalments: one at the time of competition; the other when the exhibitioner takes the Degree of M.D. in the Queen's University, provided that he graduate with honors, and within three academic years from the time of competition.

Prize in Composition, limited to the Competition of Undergraduates in Medicine.

A prize of £5 worth of books has been founded, for a thesis on a subject to be prescribed, and is limited to the competition of the Undergraduates in Medicine who shall not have already twice received the prize.

The subjects on which the competitors for composition prizes are to write, will be announced on or before the first of June in each year; the compositions, with fictitious signatures, are to be sent in to the Secretary of the University, on or before the first of the following September, and the successful competitors will be declared at the next Public Meeting of the University.

Hospital Attendance.—Clinical Lectures on Medicine and Surgery are delivered at the North and South Infirmaries, by the Physicians and Surgeons of those Institutions.

	£	s.	d.
Fee for twelve months,	8	8	0
Fee for six months,	5	5	0
Practical Pharmacy at the same Infirmaries:			
Fee for three months,	3	3	0
Clinical Midwifery at the Lying-in Hospital, with Practical Attendance upon Thirty Midwifery cases:			
Fee for six months,	3	3	0

Further information may be had from the Medical Officers at the Infirmaries.

Faculty of Law.

Lectures.

The complete Course for each Class consists of Twenty-four Lectures, by the Professor of English Law, in each Collegiate Session; and of Twenty-four Lectures in each course of the first two years. The Lectures are delivered in the months of December, February, and March.*

* The following Rules were adopted by the Honorable Society of King's Inns, in Hilary Term, 1862, with reference to attendance on Lectures, as a condition precedent to being called to the Bar, viz. :—

V.—Every Student admitted into the Society after the first day of Trinity Term, One Thousand Eight Hundred and Fifty, if a Graduate of the University of

Law Scholarships.

Examination by the Professor of Jurisprudence.

First Year:

Reddie's Inquiries in the Science of Law.
Adam Smith's Wealth of Nations—Book III.
Hallam's Middle Ages—Chap. 8.

Examination by the Professor of English Law.

Williams—Principles of the Law of Real Property.

Second Year:—By Professor of Jurisprudence.

The Lectures of the Professor in the First Year (see note).
Sandar's Institutes of Justinian—Introduction.
The Chapters on Social Science in J. S. Mill's Logic—Book VI., Chap. 6, to end of the Book.

By Professor of English Law.

The Lectures of the Professor for the preceding years.
Smith—Manual of Equity Jurisprudence.
Williams—Principles of the Law of Personal Property.
Smith—On Contracts.

Third Year:—By Professor of Jurisprudence.

Ancient Law, by H. S. Maine (omitting latter part of chap. 9, from p. 340).
Sandar's Justinian, and the Lectures of the Professor, in the first and second years.

Dublin, Oxford, Cambridge, Durham, or London, or the Queen's University in Ireland, shall, as a condition precedent to being called to the Bar, produce Certificates of his having attended two complete Courses *at least* of Lectures, viz.:—one complete Course of Lectures of any two, at his option, of the four Law Professors—namely, the Law Professors of the University of Dublin, and those of the King's Inns, and *at least* five-sixths of the Lectures of each Session or University Term; or if a Graduate in Arts of the Queen's University in Ireland, shall have the option of producing Certificates of having attended two complete Courses, at least, of Lectures of each of the two Law Professors of any College of the Queen's University, comprising not less than thirty-six Lectures, and at least five-sixths of the Lectures of each Course, and of having passed the Examinations, in the College to which he belongs, on the subjects of the aforesaid two Courses of Lectures, provided that the curriculum prescribed by the said two Courses of Lectures shall embrace all that is contained in the Course now prescribed by the Professors of the King's Inns, or as the same may be from time to time varied by any rules of the Benchers.

VI.—Every Student admitted into the Society after the above date (if not a Graduate of one of the said Universities), shall, as a condition precedent to being called to the Bar, produce Certificates of his having attended four Courses of Lectures, viz.:—One Course of the Lectures of each of the said four Professors, and, *at least*, five-sixths of the Lectures of each Session, or University Term, in such manner, however, that every such Student shall be engaged not less than three years in the study of the Law in Ireland, exclusive of the two years necessary for keeping Terms in England; in every one of which three years, one complete Course of Lectures must be kept; any Student who shall produce Certificates of his having attended during three years the Courses of Lectures delivered by the Professors of English Law and of Jurisprudence, in one of the Colleges of the Queen's University, and of his having passed the General Examinations in such College on the subjects so Lectured on, shall be deemed entitled to such and the same privileges, in respect to his being called to the Bar, as if he had actually attended One Course of the Lectures of each of the two Law Professors of the University of Dublin, and had been engaged for two years in such attendance; but this rule and the preceding one are not intended to affect the number of Terms' Commons required by the present Rules of the Society, to be kept by Students of the King's Inns, prior to being called to the Bar.

VII.—If from illness, or other sufficient cause, any Student should be prevented from completing any Course of Lectures necessary towards being called to the Bar, the Legal Education Committee have power to direct what further attendance, if any, shall be sufficient in such case.—*Rules as to Legal Education, No. 3.*

Appendix A.
General Regulations of College, &c.

NOTE.—The following works may be referred to in connexion with the principal subjects discussed in the Lectures on Jurisprudence:—

Dumont's Bentham (translation by Hildreth), "Principles of Legislation," and 1st and 2nd parts of the "Principles of the Civil Code."
Stephens' "Criminal Law."
Mill's "Political Economy"—Chapters on Property, 1 and 2, Book II., and on the Function of Government, 8, 9, 10, 11, Book V.
Mill's "Representative Government."

By Professor of English Law.

The Lectures of the Professor for the preceding years.
Smith—Leading cases on branches of the Law.
Storey—Equity Jurisprudence.

The Senior Law Scholarship will be awarded, by Examination, to the most distinguished Student who shall have proceeded in the Course of Arts to the Degree of A.B., and who shall have completed the Course of Legal Study prescribed to Candidates for the Degree of LL.B. in the Queen's University in Ireland.

Examination for the Senior Scholarship in Law.

The Lectures of the Professors and subjects appointed for Scholarship Examination in the preceding years.
Sugden—The Law of Vendors and Purchasers.
Furlong—Law of Landlord and Tenant.
Taylor—Treatise on the Law of Evidence.
Stephen—Treatise on the Principles of Pleading.
Hallam—Constitutional History.
May's Constitutional Law.

DEGREES IN LAW.

Candidates for the Diploma of Elementary Law must have passed a Matriculation Examination* (see page 10), and pursued the following

Course of Study for the Diploma of Elementary Law.

First Session—Law of Property and Principles of Conveyancing—Jurisprudence.
The Course of the Professor of English Law for the Class of the First Year, "The Law of Real Property," comprises Elementary Instruction in this branch of Law, and in practical Conveyancing. The text-book read is Williams on "Real Property." The first volume of Stephens' edition of Blackstone's Commentaries, and the second volume of Kerr's edition, are recommended for perusal.
Second Session—Equity and Bankruptcy—Civil Law.
The Course of the Professor of English Law for the Class of the Second Year, "The Law of Personal Property," Equity, and "Bankruptcy," comprise instructions in those branches of law, and in the practical application of Precedents, &c. The text-books read are Williams on "Personal Property," Smith's "Manual of Equity," "The late Statute of Bankruptcy and Insolvency," by Adams. The second volume of Stephens' and Kerr's editions of Blackstone's Commentaries, and Smith's "Mercantile Law," are recommended for perusal.
Third Session—Common and Criminal Law.
The Course of the Professor of English Law for the Class of the Third Year, "Common and Criminal Law," comprises the History, Constitution, and Jurisdiction of the several Courts of Justice; Procedure in Crown and Civil Causes at Law and in Equity, as also in the Local Courts. The text-

* NOTE.—It will be sufficient for such Candidate to have passed his Examination at *any* time previous to applying for the Diploma. By the Act of Parliament, 14 and 15 Vic., cap. 88, it is provided, that every person who, as a Matriculated or Non-Matriculated Student, shall have attended the prescribed Lectures, and passed the prescribed Examinations of the Professors of the Faculty of Law for two Collegiate years, and who shall have duly served as an apprentice or clerk by contract in writing, duly stamped at or before the signing thereof, or within six months after, for the term of four years, shall, at any time after the expiration of five years from the commencement of such attendance on Lectures, or of such a period of service, whichever shall first happen, be qualified to be admitted as an Attorney or Solicitor as fully and effectually as any person having been bound, and having served five years is now qualified to be admitted. See also the same Act for the privileges extended to Graduates of the Queen's University, respecting admission to the profession of Attorney or Solicitor.

books are the third and fourth volumes of Blackstone's Commentaries, Stephens' and Kerr's editions, Broom's "Common Law," Broom's "Maxims," Smith's "Leading Cases," and Copinger's "County Courts," are recommended for perusal.

Students intending to proceed for the certificate of the Law Professors, so as to entitle themselves to serve an apprenticeship of four years instead of five, under the Act for amending the several Acts for the regulation of Attorneys and Solicitors (14 and 15 Vict., chap. 88), must enter their names with the Registrar of one of the Queen's Colleges of Cork, Belfast, and Galway, and pay the necessary College and Class Fees to the Bursar before the commencement of the Law Lectures in each Session.

Such Students need not pass the Matriculation Examination, but must attend the Lectures, and pass the College Examinations prescribed for the first and second years, of the course of study for Candidates for the Diploma in Elementary Law.

Candidates for the Degree of LL.B. will be admitted to Examination for that Degree from the Queen's University in Ireland, provided they shall have proceeded to the Degree of A.B., and shall have attended the Lectures and passed the Examinations prescribed for the Diploma of Elementary Law.

Students who have obtained the Degree of LL.B. will, at the expiration of two years after they have obtained the Degree, be admitted to the Examination for the Degree of LL.D. They are examined in the Laws of the Admiralty and Ecclesiastical Courts of England and Ireland, and in International Law.

Books suggested:

Lord Hale's Treatise, De Jure Maris.
Dr. FitzHenry Townsend's statement of the differences in Jurisdiction and Practice between the English and Irish Courts of Admiralty, annexed to the Report of the Royal Commission of Inquiry, 1864.
Rogers' Ecclesiastical Law.
Wheaton's International Law.
"Historicus," Letters of, on International Law.

Table of Class Fees.

Arts Curriculum.

First Session.

	£	s.	d.
English (One Term),	1	0	0
Greek,	2	0	0
Latin,	2	0	0
A Modern Continental Language,	2	0	0
Mathematics (First Course),	2	0	0
College Fee,	0	10	0

Second Session.

Logic (One Term),	1	0	0
Natural Philosophy,	2	0	0
Greek (Second Course),	2	0	0
Latin (Second Course),	2	0	0
Modern Continental Languages (Second Course),	1	0	0
Mathematics (Second Course),	2	0	0
College Fee,	0	5	0

Third Session.

English Language and Literature,	2	0	0
Metaphysics, or History, or Political Economy (Two Terms), each,	2	0	0
Chemistry,	2	0	0
Zoology or Botany,	2	0	0
College Fee,	0	5	0

Engineering Curriculum.

First Session.

	£	s.	d.
Mathematics (First Course),	2	0	0
Chemistry,	2	0	0
Modern Languages,	2	0	0
Geometrical Drawing,	2	0	0
Office Work,	2	0	0
Mineralogy, Geology, and Physical Geography,	2	0	0
College Fee,	0	10	0

Second Session.

Mathematics (Second Course),	2	0	0
Experimental Physics,	2	0	0
Civil Engineering,	2	0	0
*Office Work,	2	0	0
College Fee,	0	5	0

Third Session.

Natural Philosophy, applied,	2	0	0
Mathematical Physics,	2	0	0
Civil and Mechanical Engineering,	2	0	0
*Office Work,	2	0	0
College Fee,	0	5	0

* For students who have attended this course in the first year the fee is only £1.

Appendix A.

General Regulations of College, &c.

Table of Hours of Lecture.

Name of the Class.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Senior Greek,	9	9	10	–	9	–
Junior Greek,	10	–	9	9	10	–
Extra Greek,	–	10	–	10	–	–
Senior Latin,	10	–	9	–	10	–
Junior Latin,	9	10	10	10	–	–
Extra Latin,	–	11	–	11	–	–
English Language,	–	11	–	11	–	10
English Literature,	–	12	–	12	–	11
History,	12	–	12	–	12	–
Medical French,	12	–	12	–	12	–
Senior French (*Arts and Engineering*),	1	–	1	–	1	–
Junior French (*Arts and Engineering*),	2	–	2	–	2	–
German or Italian,	–	2	–	2	–	2
Celtic Languages,	12	–	12	–	12	–
Logic,	–	12	–	12	–	9
Metaphysics,	–	1	–	1	–	10
Political Economy and Jurisprudence,	–	11	11	11	11	–
Senior Mathematics,	2	–	2	–	2	–
Junior Mathematics,	12	–	12	–	12	–
Third Year's Mathematics,	3	–	3	–	3	–
Mathematical Physics,	–	–	12	–	12	–
Mathematical Physics (*Engineering*),	1	–	–	1	–	2
Experimental Physics, Senior,	11	–	11	–	11	–
Experimental Physics, Junior,	–	11	–	11	–	–
Engineering Physics,	–	1	–	–	1	–
Physics (Honor),	12	–	–	12	–	–
Chemistry,	11	–	11	–	11	–
Practical Chemistry,*	2	–	2	–	2	–
Zoology and Botany,	3	–	3	–	3	–
Geology and Mineralogy,	–	2	–	2	–	10
Senior Engineering,	12	–	12	–	12	–
Junior Engineering,	–	10	–	10	–	10
Geometrical Drawing,	10	–	10	–	10	–
Office Work (10 till 2),	–	10	–	10	–	10
Anatomy and Physiology,	1	1	1	1	1	–
Practical Anatomy,	12	12	12	12	12	–
Medicine,	3	–	3	–	3	–
Surgery,	–	4	–	4	–	1
Materia Medica,	–	3	–	3	–	12
Midwifery,	4	–	4	–	4	–
Medical Jurisprudence,	–	12	–	12	1	–
English Law (1st year),	–	11	11	11	11	–
English Law (2nd year),	–	3	3	3	3	–
English Law (3rd year),	–	9	9	9	9	–
English Law (4th year),	–	12	12	12	12	–
Jurisprudence,	–	1	1	1	1	–
Civil Law,	–	4	4	4	4	–
Constitutional and International Law,	–	10	10	10	10	–

The Fees payable by Students, whether Matriculated or Non-matriculated, to the several Professors, for attendance on the several Pass Courses of Lectures or instruction, which are now or may be hereafter prescribed by the College Council, for any Degree or other University distinction, shall be £1 for each Course extending over one Term only, and £2 for each Course extending over more than one Term of a Session, when attended for the first time, and £1 for each re-attendance on the same; except that the Fee payable for the Course of Anatomy and Physiology shall be £3 when attended for the first time, and £2 for every subsequent attendance; except also, that the Fee payable for Practical Anatomy or Practical Chemistry, shall be £3 for each attendance.

In the case of Students receiving special instructions, not prescribed as a

* If it be necessary to divide the Practical Chemistry Class, the hours for the Second Class will be at two on Tuesday and Thursday, and eleven on Saturday.

qualification for a Degree or other University distinction, or attending Honor Courses of Lectures, the Council shall have power to fix the amount of the Fee to be paid by each Student; provided that the Fee to be paid for any Honor Course of Lectures which Students are entitled to substitute for a prescribed Pass Course, shall in no case be less than £2.

Appendix A. General Regulations of College, &c.

PROGRAMME OF THE TIMES AND SUBJECTS OF THE SCHOLARSHIP EXAMINATIONS FOR THE SESSION 1869–70.

Examination Days.	From 9 to 12 o'clock.	From 2 to 5 o'clock.
Thursday, October 21st,	Greek. Geometrical Drawing.	Greek.
Friday, October 22nd, .	Latin.	Mathematics.
Saturday, October 23rd,	Modern Languages.	Pathology. Latin.
Monday, October 25th,	Materia Medica. Therapeutics. English Language (1st year).	Zoology and Botany. Practical Anatomy. History and English Li (senior).
Tuesday, October 26th,	English Literature (2nd and 3rd year).	Anatomy and Physiology.
Wednesday, Oct. 27th,	Surveying, &c. Surgery.	Practical Chemistry.
Thursday, October 28th,	Political Economy.	Midwifery.
Friday, October 29th, .	Logic. Metaphysics,	Chemistry.
Saturday, October 30th,	Natural Philosophy.	Geology and Mineralogy.
Thursday, Dec. 2nd, .	English Law.	Civil Law.

APPENDIX.

Outlines of the Courses of Lectures delivered by the Professors of the Faculty of Arts.

LITERARY DIVISION OF THE FACULTY OF ARTS.

In Greek and Latin the classification of the Students is irrespective of their Collegiate standing; those of the First and Second years being distributed between two classes according to their proficiency. There is also in each of these Departments an Extra Class, the attendance on which is voluntary, and which consists generally of those Students who propose to become Candidates for Degree of A.M. or Classical Honors in the Queen's University, or for appointments in the Indian Civil Service.

Both the Extra and Ordinary Classes are open to Non-Matriculated Students, *i.e.* to gentlemen who have not yet commenced their Undergraduate course, or who do not intend to take *Degrees in Arts*.

THE GREEK LANGUAGE.

Professor, JOHN RYALL, LL.D.

Junior Class: Monday, Wednesday, Thursday, and Friday.—Xenophon, Anab. Book VII.

Second Year: Monday, Wednesday, Thursday, and Friday.—Sophocles—Philoctetes; Demosthenes in Midiam.

Third Year: Tuesday, Thursday.—Æschylus—Eumenides; Thucydides, Book VI.

Exercises in Prose and Verse, according to the proficiency of the Students.

Appendix A.

General Regulations of College, &c.

The Latin Language.

Professor, Bunnell Lewis, M.A., F.S.A.

Senior Class, Monday, Wednesday, and Friday:
Juvenal—Satires, XIII.—XVI.
Cicero—De Natura Deorum, Book I., beginning at c. 21.
Junior Class, Monday, Tuesday, Wednesday, and Thursday:
Livy—Part of Book XXIII.
Virgil—Georgics, Book II.
Exercises in both Classes chiefly from Arnold's Introduction to Latin Composition.
Extra and Third Year's Class, Tuesday and Thursday:
Tacitus—Annals, Book IV.
Lucretius, Book III.

In this Class special attention is paid to original Composition, and to translation from English Authors into Latin.

History, English Literature, and the English Language.

Professor, William Rushton, M.A.

1st and 2nd Term. { History—Monday, Wednesday, and Friday.
English Literature—Tuesday, Thursday, and Saturday.
2nd Term—The English Language—Tuesday, Thursday, Saturday.

History:

1. European History from the decline of the Roman Empire to the present time.
2. History of Britain and Ireland.

English Literature:

The Course will include the History of English Literature, along with a Critical Examination of its Standard Works from the earliest period up to the present day.

The English Language:

1. The History of the English Language.
First Year.—Text Book, Craik's Outlines.
Third Year.—Text Books, Max Müller on the Science of Language.
Marsh's Lectures.
2. Grammar and Composition.
Text Books, Latham—English Language.
Adams—Elements of the English Language.
Rushton—Rules and Cautions in English Grammar.
Campbell's Philosophy of Rhetoric.
Whately's Rhetoric.

English Composition.
Essays on subjects discussed in the Lectures. Translations. Analysis. Original Essays.

Modern Languages.

Professor, R. De Vericour, M.A.

French Class (Medical), Mondays, Wednesdays, and Fridays, at 12 o'clock.
Senior French (Arts and Engineering), Mondays, Wednesdays, and Fridays, at 1 o'clock.
Junior French Class (Arts and Engineering), Mondays, Wednesdays, and Fridays, at 2 o'clock.
German or Italian, Tuesdays and Fridays, at 2 o'clock.
Medical French—Lectures sur les Sciences, par Achille Comte. Extracts from Bichat, Andral, Lallemand, and Chomel. Weekly Lectures on the Grammar and Idioms.
Senior and Junior French—Corneille's Cid and Cinna. Fables de Lafontaine. Racine's Athalie, and Esther. Histoire de la Revolution Française, par Mignet. La Misanthrope and L'Avare of Molière. Histoire de la Littérature Française, par Demogeot. Lectures sur les Sciences, par Achille Comte. Weekly Lectures on the Grammar and Idioms.
Italian—Silvio Pellico. Tasso. Extracts from Machiavelli, Guicciardini, Davila, Manzoni. Weekly Lectures.
German—Goethe's Ballads and Iphigenie. Schiller's Wilhelm Tell. National-Literatur, von A. F. Villmar. Weekly Lectures.

SPECIAL COURSE NOT REQUIRED FOR A DEGREE.—CELTIC LANGUAGES.

Professor, OWEN CONNELLAN, Esq.

Monday, Wednesday, and Friday.

Subject—I. The Celtic Family of Languages; and its existing derivations, the Erse or Gaelic, Manx, Welch, Armorican, and Hiberno-Celtic. The Ogham Alphabet. The Ancient Literature of Ireland, viz.:—The earlier Bardic Compositions, the Ossianic Poems and Fenian Legends; View of the Contemporaneous state of Ireland.*

II. The Irish Language as now extant, its Grammar, Vocabulary, and Dialects. In this part of the course, the Student will be taught to speak and write the language grammatically.

* The Lectures will be illustrated by reference to Irish MSS., and such publications on Irish Historical and general Literature as are at present accessible.

SCIENCE DIVISION OF THE FACULTY

MATHEMATICS.

Professor, CHARLES NIVEN, B.A.

Junior Class, Monday, Wednesday, and Friday.
Subjects—Arithmetic, Algebra, Geometry, and Plane Trigonometry.

Second Year's Class, Monday, Wednesday, and Friday.
Subjects—Analytical Geometry, Trigonometry, Differential and Integral Calculus.

Third Year's Class:
Subjects—Geometry of three dimensions, Differential Equations, &c.
Exercises are regularly set in each of the Classes.

LOGIC AND METAPHYSICS.

Professor, GEORGE SIDNEY READ, M.A.

2nd Term, . Logic, . Tuesday, Thursday, and Saturday.
1st & 2nd Terms, Metaphysics, Do. do. do.

Logic.—This Course consists of:—

I.—Lectures, Examinations, and Exercises in Aldrich's Compendium of Logic, occupying the early part of the Term, &c.

II.—A full discussion of Classification, the Theory of Hypothetical Syllogisms and of Induction, and the Analytic of Logical Forms, as contained in the works of Mill, Whately, Thompson, and Baynes.

Throughout the Course the Students will be expected to familiarize themselves with the reduction of arguments to their strict Logical Form by written exercises, which will be examined by the Professor.

Metaphysics.—This Course will embrace:—

I.—The Philosophy of the Inductive Sciences, illustrated by reference to Lord Bacon, Whewell, and Mill; and—

II.—The History of Mental Philosophy, comprising—

1st.—The origin, progress, and development of Modern Philosophy anterior to the rise of the Scottish School.

2nd.—A critical examination of the works of the more celebrated writers of that School.

3rd.—A brief view of the present state of Philosophy in the British Islands and on the Continent.

POLITICAL ECONOMY.

Professor, RICHARD HORNER MILLS, M.A.

Political Economy.—The nature and distribution of wealth, the principles which regulate Rents, Profits, and Wages; the Principles of Commerce, of Taxation, of the Funding System, and of Currency and Banking.

Books recommended:—

Adam Smith—Wealth of Nations.
Senior—Political Economy.
Fawcett's Manual of Political Economy.
John Stuart Mill—Political Economy.

Appendix A.

General Regulations of College, &c.

Richard H. Mills—Lectures on Currency and Banking (Second Edition).
M'Culloch—Taxation and Funding (Third Edition).
Goschen on Foreign Exchanges.

The Course consists of Twenty-four Lectures, delivered in the months of December, February, and March; the Students are required in the intervals to prepare the subjects which will be pointed out by the Professor.

Chemistry.

Professor, John Blyth, M.D.

Monday, Wednesday, and Friday.

The Course is divided into Inorganic and Organic Chemistry.

In the first part are discussed the Laws of Combination and Affinity, Molecular Chemistry and Crystallography, and the History of the Non-Metallic and Metallic substances.

In the Organic portion of the Course will be considered the subjects of Organic Analysis, Organic Series, Compound Radicals and Types, Metamorphosis of Organic Bodies, History of special Animal and Vegetable Bodies.

In treating of the Laws of Chemistry, and the History of Inorganic and Organic Bodies, those points will be chiefly dwelt upon which have a practical bearing in the Arts, Medicine, Engineering, and Agriculture. Thence, during the Course, attention will be directed to the application of Chemistry to Medicine and Physiology, to Metallurgic Operations, Chemical Manufactures, Building Materials, Soils, Manures.

Fee, for each Sessional Course, £2. Each subsequent Course in Medicine, £1.

Analytical Chemistry:

The Chemical Laboratory is open daily, except on Saturdays, from 10 to 4 o'clock, under the superintendence of the Professor, for students desirous of prosecuting an extended course of qualitative and quantitative analysis, and for the purpose of original investigation in connexion with the arts, or in the higher departments of Scientific Chemistry.

Natural Philosophy.

Professor, John England, M.A.

Experimental Physics (Senior):

Text Books—Galbraith and Haughton's Manuals of Mechanics, Hydrostatics, &c.; Jamin; Traite de Physique.

Experimental Physics (Junior):

Text Books—Ganot, Traite de Physique.

Mathematical Physics:

Text Books—Duhamel's *Mecanique*. Parkinson's *Optics*. Brinkley's *Astronomy*.

Engineering Physics:

Text Books—Tate's *Exercises in Mechanics*, selections from the works of Mosely, De Pambour, Weisbach, Twisden's Practical Mechanics, &c.

Natural History.

Professor, Joseph Reay Greene, B.A., M.D.

Monday, Wednesday, and Friday.

The Lectures delivered by the Professor of Natural History are as follows:—

A Course of Lectures on General Zoology.
A Course of Lectures on Botany.

Students may obtain Certificates of Attendance on all or any of these Courses.

Text Books recommended:

In Botany—"Elementary Course of Botany," by Henfrey.
In Zoology—"Zoologie" (in Cours Elémentaire d'Histoire Naturelle), par Milne Edwards; or the English translation of the same work by Dr. Knox.

Such Students as desire during the Summer months to pursue the study of Botany in the field, are requested to provide themselves with Lindley's "Descriptive Botany," and Bentham's "Handbook of the British Flora."

Geology and Mineralogy.

Professor, Robert Harkness, F.R.S.S.L. & E., F.G.S.

Tuesday, Thursday, and Saturday.

General Structure of the Earth: the causes at present in operation which modify its surface; Nature of Rocks which enter into composition with the crust of the Globe; description and classification of Sedimentary Deposits; Organic Remains; Physical Geography of the Earth during the several geological epochs; characters and nature of Igneous, Plutonic, and Metamorphic Rocks; Mineral Veins—their contents and mode of occurrence; application of Geology to Engineering, Mining, Agriculture and Land Improvement.

Forms, Structure, Physical and Chemical characters of Minerals; description of the most important simple minerals—circumstances and conditions unde which they are found.

Civil Engineering.

Professor, Alexander Jack, M.A.

First Year.—Monday, Wednesday, and Friday.

Subject of Lectures—Orthographic Projection; Descriptive Geometry; Shadows; Isometric Projection; Perspective; Geometry of the Oblique Bridge; Principles of Architecture.

Text Books—Hall's Descriptive Geometry; Engineer and Machinist's Drawing Book; Rickman's Architecture; Buck on Oblique Bridges.

Second Year.—Tuesday, Thursday, and Saturday.

Subject of Lectures—Surveying and Levelling.

Text Books—Rankine's Civil Engineering; Cotton's Manual of Railway Engineering; Williams' Geodesy.

Third Year.—Monday, Wednesday, and Friday.

Materials used in Construction; Principles of Construction of Bridges, Roads, Railways, Canals; Hydraulic Engineering; Strength of Materials; Principles of the Construction of the different Machines employed by the Engineer.

Drawing Office—Attended by all the Classes—Tuesday, Thursday, and Saturday.

The First Year's Class are chiefly employed in drawing the problems given at lectures, and a few easy examples of their applications. The Second and Third Years' Classes, in making working drawings of examples of the subjects of lectures, and in Mapping.

Practical Instruction in the Field in the use of Surveying Instruments will be given during the Session.

Special Prospectus of Courses of Instruction given in the Colleges which are applicable to the Examination for the Indian Civil Service.

Subjects of Examination for the Indian Civil Service.		*Lectures on these Subjects in Queen's College, Cork.*
1. English Language and Literature:		History and English Language—*Professor*, William Rushton, M.A.
a. Composition,	Marks, 500	*First Term.*—Modern History: Monday, Wednesday, and Friday.
b. English Literature and History, including that of the Laws and Constitution,	Marks, 1,000	*Second Term.*—English Literature: Tuesday, Thursday, and Saturday. History of the English Language: Tuesday, Thursday, Saturday.
	1,500	English Composition will, at the stated periods, be required from the students.

Appendix A.

Special Prospectus of Courses for Competitive Examinations.

2. LANGUAGE, LITERATURE, and HISTORY of GREECE:
Marks, 750

GREEK—*Professor*, John Ryall, LL.D.
Senior Class: Monday, Friday, Wednesday.
Junior Class: Monday, Friday, Wednesday, Thursday.
Extra Class: Tuesday, Thursday.

3. LANGUAGE, LITERATURE, and HISTORY of ROME:
Marks, 750

LATIN—*Professor*, Bunnell Lewis, M.A. F.S.A.
Senior Class: Monday, Wednesday, Friday.
Junior Class: Monday, Tuesday, Wednesday, Thursday.
Extra Class: Tuesday and Thursday.

The Extra Class, both in Latin and Greek, the attendance on which is voluntary, consists generally of those students who propose to become Candidates for the Degree of M.A., or Classical Honors, in the Queen's University, or for appointments in the Indian Civil Service.

4. LANGUAGE, LITERATURE, and HISTORY of FRANCE:
Marks, 375

FRENCH—*Professor*, R. De Vericour, M.A.
Senior Class: Monday, Wednesday, Friday.
Junior Class: Monday, Wednesday, Friday.

5. LANGUAGE, LITERATURE, and HISTORY of GERMANY:
Marks, 375

GERMAN.
Tuesday, Thursday.

6. LANGUAGE, LITERATURE, and HISTORY of ITALY:
Marks, 375

ITALIAN.
Monday, Wednesday, and Friday.

7. MATHEMATICS, Pure and Mixed:
Marks, 1,250

MATHEMATICS—*Professor*, Charles Niven, B.A.
Junior Class: Monday, Wednesday, Friday.
Senior Class: Monday, Wednesday, Friday.

MATHEMATICAL PHYSICS—*Professor*, John England, M.A.
Tuesday, Thursday, and Saturday.

8. NATURAL SCIENCES: that is, Chemistry, Electricity, and Magnetism, Natural History, Geology, and Mineralogy:
Marks, 500

*** No Candidate will be allowed to be examined in more than three of the branches of knowledge included under this head, and the total (500 marks) may be obtained by adequate proficiency in any three.

CHEMISTRY—*Professor* Blyth, M.B.
Monday, Wednesday, and Friday.

EXPERIMENTAL PHYSICS (Electricity and Magnetism)—*Professor*, John England, M.A.
Monday, Wednesday, and Friday.

NATURAL HISTORY—*Professor*, J. R. Greene, B.A., M.D.
Monday, Wednesday, and Friday.

GEOLOGY and MINERALOGY—*Professor*, Robert Harkness, F.R.SS.L. & E., F.G.S.
Tuesday, Thursday, and Saturday.

9. MORAL SCIENCES: that is, Logic, Mental and Moral Philosophy: Marks, 500	LOGIC and METAPHYSICS—*Professor*, G. S. Read, M.A. Logic: Tuesday, Thursday, Saturday. Metaphysics: Tuesday, Thursday, Saturday. JURISPRUDENCE and POLITICAL ECONOMY—*Professor*, Richard Horner Mills, M.A.	*Appendix A.* Special Prospectus of Courses for Competitive Examinations.

COURSES of INSTRUCTION given in the COLLEGE which are applicable to the COMPETITIVE EXAMINATION for ADMISSION to the ROYAL MILITARY ACADEMY at WOOLWICH.

Subjects of Examination for the direct appointment to the Practical Class at Woolwich.	*Lectures on these Subjects in Queen's College, Cork.*
MATHEMATICS (Pure): Marks, 2,500	*Professor*, Charles Niven, B.A. Junior Class: Monday, Wednesday, Friday. Senior Class: Monday, Wednesday, Friday.
MATHEMATICS (Mixed):— Statics, Dynamics, Hydrostatics: Marks, 1,000	*Professor*, John England, M.A. Tuesday, Thursday, and Saturday.
LANGUAGE of ANCIENT ROME: Marks, 1,500	*Professor*, Bunnell Lewis, M.A., F.S.A. Junior Class: Monday, Tuesday, Wednesday, Thursday.
LANGUAGE of ANCIENT GREECE: Marks, 1,500	*Professor*, John Ryall, LL.D. Junior Class: Monday and Friday, Wednesday and Thursday.
LANGUAGE of FRANCE: Marks, 1,000	*Professor*, Raymond de Vericour, M.A. Monday, Wednesday, and Friday.
And GERMANY: Marks, 1,000	
ENGLISH LANGUAGE, LITERATURE, COMPOSITION, HISTORY and GEOGRAPHY (Modern): Marks, 3,000	*Professor*, William Rushton, M.A. Tuesday, Thursday, and Saturday.
EXPERIMENTAL SCIENCES:— Chemistry: Marks, 1,000	*Professor*, John Blyth, M.D. Monday, Wednesday, and Friday.
HEAT, ELECTRICITY, including MAGNETISM: Marks, 1,000	*Professor*, John England, M.A. Monday, Wednesday, and Friday.
NATURAL SCIENCES:— Mineralogy and Geology: Marks, 1,000	*Professor*, Robt. Harkness, F.R.SS.L. & E., F.G.S.
DRAWING, *i.e.*, Elementary Geometrical Drawing, including the use of Drawing Instruments: Marks, 500	*Professor*, Alexander Jack, M.A. Monday, Wednesday, and Friday.
Machinery, Architectural, Topographical, Landscape, or Figure Drawing: Marks, 500	Monday, Wednesday, and Friday.

Appendix A.

Special Prospectus of Courses for Competitive Examinations.

Competitive Examinations for admission are held in London twice a year, in January and July. They are conducted by Examiners appointed for the purpose, in the presence and under the superintendence of the Council of Military Education.

The Candidates must be between 16 and 19 years of age.

The admissions will be determined by the result of the examination, the subjects of which will be as follows, viz.:—

			Marks.
1. Mathematics,	Pure,	Section I. Arithmetic, Algebra, Euclid, Plane Trigonometry, . 2,000	3,500
		Section II. Spherical Trigonometry, elements of Co-ordinate Geometry, and of the Differential and Integral Calculus,* . 500	
	Mixed:—Statics, Dynamics, and Hydrostatics, ...	1,000	
2. English Language and Composition, ...			1,000
3. History of England, its Dependencies and Colonies, . .			1,000
4. Geography (Modern), ...			1,000
5. Classics, Latin Language, ...			1,500
Greek ditto, ...			1,500
6. French Language, ...			1,000
7. German ditto, ...			1,000
8. Hindustani ditto, ...			1,000

The examination in French, German, and Hindustani, will include writing from dictation.

9. Experimental Sciences, *i.e.*, Chemistry, Heat, Electricity, including Magnetism, ...		1,000
10. Natural Sciences, *i.e.*, Mineralogy and Geology, . .		1,000
11. Drawing,	Elementary Geometrical Drawing, including the use of Drawing Instruments, . . .	500
	Free-hand Drawing of Machinery, Architectural, Topographical, Landscape, or Figure Subjects, . .	500

* *Syllabus of Examination in the Differential and Integral Calculus.*

DIFFERENTIAL CALCULUS.

The meaning of Differentiation.
The Differentiation of Elementary Functions of one independent variable.
The theorems of Taylor and Maclaurin, with their applications.
The theory of Maxima and Minima, with its applications.
The equations to the Tangents, Normals, and Asymptotes of Plane Curves.
The curvature of Plane Curves and their radii of curvature and evolutes.
The Differential Coefficients of the Arcs and Areas of Plane Curves to rectangular and polar Co-ordinates, and of the surfaces and volumes of solids of revolution.

INTEGRAL CALCULUS.

The meaning of Integration.
The Integration of Elementary Functions.
The Integration of Rational Fractions.
The determination of the lengths and areas of Plane Curves, and of the surfaces and volumes of solids of revolution.

No Candidate will be allowed to be examined in more than five subjects, of which one must be Mathematics; and no one who does not obtain at least 700 marks in Section I. of Pure Mathematics will be eligible for an appointment.

Residences.

There is no accommodation for the residence of students within the College, but it is provided by the Statutes that every Matriculated Student, being under the age of Twenty-one Years, shall reside, during the College Terms, with his parent or guardian, or with some relation or friend, to whose care he shall have been committed by his parent or guardian, or in one of the Boarding-houses licensed by the President of the College and arranged for the reception of students, who are then placed under the moral care and spiritual charge of the Deans of Residence of their respective creeds.

The Terms for Board and Lodging are generally at the rate of from £30 to £40 a-year.

DEANS of RESIDENCES.

Church of England,	. . .	Rev. George Webster, D.D.
Presbyterian Church,	. . .	Rev. William Magill.
Wesleyan Communion,	. . .	Rev. Edward Best.
Non-Subscribing Presbyterian,	. .	Rev. W. Whitelegge, M.A.

N.B.—Letters from persons desiring further information, to be addressed to the Registrar.

Signed,

By order of the President,

ROBERT JOHN KENNY, *Registrar.*

APPENDIX B.

SELECTION OF PAPERS OF QUESTIONS USED AT THE SESSIONAL EXAMINATIONS.

THIRD YEAR'S GREEK CLASS.

1. Give the dates of the commencement and close of the Peloponnesian war, and notice its most important incidents.

2. Translate the following passages, making such comments as you may think necessary :—

THUCYDIDES, Book IV.

a. Ἐς τοῦτό τε περιέστη ἡ τύχη ὥστε Ἀθηναίους μὲν ἐκ γῆς τε καὶ ταύτης Λακωνικῆς ἀμύνεσθαι ἐκείνους ἐπιπλέοντας, Λακεδαιμονίους δὲ ἐκ νεῶν τε καὶ ἐς τὴν ἑαυτῶν πολεμίαν οὖσαν ἐπ' Ἀθηναίους ἀποβαίνειν· ἐπὶ πολὺ γὰρ ἐποίει τῆς δόξης ἐν τῷ τότε τοῖς μὲν ἠπειρώταις μάλιστα εἶναι καὶ τὰ πεζὰ κρατίστους, τοῖς δὲ θαλασσίοις τε καὶ ταῖς ναυσὶ πλεῖστον προέχειν.—ch. 12.

b. Σωφρόνων δὲ ἀνδρῶν οἵτινες τἀγαθὰ ἐς ἀμφίβολον ἀσφαλῶς ἔθεντο (καὶ ταῖς ξυμφοραῖς οἱ αὐτοὶ εὐξυνετώτερον ἂν προσφέροιντο), τόν τε πόλεμον νομίσωσι μὴ καθ' ὅσον ἄν τις αὐτοῦ μέρος βούληται μεταχειρίζειν, τούτῳ ξυνεῖναι, ἀλλ' ὡς ἂν αἱ τύχαι αὐτῶν ἡγήσωνται· καὶ ἐλάχιστ' ἂν οἱ τοιοῦτοι πταίοντες, διὰ τὸ μὴ τῷ ὀρθουμένῳ αὐτοῦ πιστεύοντες ἐπαίρεσθαι, ἐν τῷ εὐτυχεῖν ἂν μάλιστα καταλύοιντο.—ch. 18.

c. Μετὰ δὲ ταῦτα γενομένης τῆς ἀνακωχῆς ξυνῆλθον ἐς λόγους ὅ τε Κλέων καὶ ὁ Δημοσθενης καὶ ἐκείνων Στύφων ὁ Φάρακος, τῶν πρότερον ἀρχόντων τοῦ μὲν πρώτου τεθνηκότος, Ἐπιτάδου τοῦ δὲ μετ' αὐτὸν Ἱππαγρέτου ἐφῃρημένου ἐν τοῖς νεκροῖς ἔτι ζῶντος κειμένου ὡς τεθνεῶτος, αὐτὸς τρίτος ἐφῃρημένος ἄρχειν κατὰ νόμον, εἴ τι ἐκεῖνοι πάσχοιεν.—ch. 38.

d. Πόλεμον γὰρ αἱρομένων ἡμῶν καὶ ἐπαγομένων αὐτούς, ἄνδρας οἳ καὶ τοὺς μὴ ἐπικαλουμένους αὐτοὶ ἐπιστρατεύουσι, κακῶς τε ἡμᾶς αὐτοὺς ποιούντων τέλεσι τοῖς οἰκείοις, καὶ τῆς ἀρχῆς ἅμα προκοπτόντων ἐκείνοις, εἰκός, ὅταν γνῶσιν ἡμᾶς τετρυχωμένους, καὶ πλέονί ποτε στόλῳ ἐλθόντας αὐτοὺς τάδε πάντα πειράσασθαι ὑπὸ σφᾶς ποιεῖσθαι.—ch. 60.

e. Καὶ οὐκ ἀδικεῖν ἔτι νομιῶ προσεῖναί δέ τί μοι καὶ κατὰ δύο ἀνάγκας τὸ εὔλογον, τῶν μὲν Λακεδαιμονίων, ὅπως μὴ τῷ ὑμετέρῳ εὖνῳ, εἰ μὴ προσαχθήσεσθε, τοῖς ἀπὸ ὑμῶν χρήμασι φερομένοις παρ' Ἀθηναίους βλάπτωνται, οἱ δὲ Ἕλληνες ἵνα μὴ κωλύωνται ὑφ' ὑμῶν δουλείας ἀπαλλαγῆναι.—ch. 87.

f. Νυνὶ δ' εἴ τῳ καὶ ἀσφαλέστερον ἔδοξεν εἶναι, μεταγνώτω. οὐ γὰρ τὸ προμηθὲς, οἷς ἂν ἄλλος ἐπίῃ, περὶ τῆς σφετέρας ὁμοίως ἐνδέχεται λογισμὸν καὶ ὅστις τὰ μὲν ἑαυτοῦ ἔχει, τοῦ πλείονος δὲ ὀρεγόμενος ἑκών τινι ἐπέρχεται.—ch. 92.

Appendix B.

Selection of Papers used at the Sessional Examinations.

3. Punctuate, accentuate, and translate:—

καλως δε ενομιζον σφισιν αμφοτερα εχειν αμα μεν το μη επιχειρειν προτερους μηδε μαχης και κινδυνου εκοντας αρξαι επειδη γε εν φανερω εδειξαν ετοιμοι οντες αμυνεσθαι και αυτοις ωσπερ ακοντι την νικην δικαιως αν τιθεσθαι εν τω αυτω δε και προς τους Μεγαρεας ορθως ξυμβαινειν.

4. Translate into Attic Greek:—

But where God hath a purpose to destroy, wise men grow short-lived, and the charge of things is committed to such as either cannot see what is for their good, or know not how to put in execution any sound advice. The course which Memnon had propounded must, in all appearance of reason, have brought the Macedonian to a great perplexity, and made him stand still awhile at the straits of Cilicia, doubting whether it were more shameful to return or dangerous to proceed; for had Cappadocia and Paphlagonia been wasted while Alexander was far off, and the straits of Cilicia been defended by Arsenes, governor of that province, with the best of his forces, hunger would not have suffered the enemy to stay the trial of all means that might be thought upon of forcing that passage; or if the place could not have been maintained, yet might Cilicia, at better leisure have been so thoroughly spoiled, that the heart of his army should have been broken, by seeking out miseries by painful travel.

SENIOR GREEK CLASS.

1. Translate, in English:—

THUCYDIDES, Book I., c. 84.

Καὶ τὸ βραδὺ καὶ μέλλον, ὃ μέμφονται μάλιστα ἡμῶν, μὴ αἰσχύνεσθε. σπεύδοντές τε γὰρ σχολαίτερον ἂν παύσαισθε διὰ τὸ ἀπαράσκευοι ἐγχειρεῖν· καὶ ἅμα ἐλευθέραν καὶ ἐνδοξοτάτην πόλιν διὰ παντὸς νεμόμεθα· καὶ δύναται μάλιστα σωφροσύνη ἔμφρων τοῦτ' εἶναι. μόνοι γὰρ δι' αὐτὸ εὐπραγίαις τε οὐκ ἐξυβρίζομεν καὶ ξυμφοραῖς ἧσσον ἑτέρων εἴκομεν, τῶν τε ξὺν ἐπαίνῳ ἐξοτρυνόντων ἡμᾶς ἐπὶ τὰ δεινὰ παρὰ τὸ δοκοῦν ἡμῖν οὐκ ἐπαιρόμεθα ἡδονῇ, καὶ ἤν τις ἄρα ξὺν κατηγορίᾳ παροξύνῃ, οὐδὲν μᾶλλον ἀχθεσθέντες ἀνεπείσθημεν. πολεμικοί τε καὶ εὔβουλοι διὰ τὸ εὔκοσμον γιγνόμεθα, τὸ μὲν ὅτι αἰδῶς σωφροσύνης πλεῖστον μετέχει, αἰσχύνης δὲ εὐψυχία, εὔβουλοι δὲ ἀμαθέστερον τῶν νόμων τῆς ὑπεροψίας παιδευόμενοι καὶ ξὺν χαλεπότητι σωφρονέστερον ἢ ὥστε αὐτῶν ἀνηκουστεῖν, καὶ μὴ τὰ ἀχρεῖα ξυνετοὶ ἄγαν ὄντες, τὰς τῶν πολεμίων παρασκευὰς λόγῳ καλῶς μεμφόμενοι ἀνομοίως ἔργῳ ἐπεξιέναι, νομίζειν δὲ τάς τε διανοίας τῶν πέλας παραπλησίους εἶναι, καὶ τὰς προσπιπτούσας τύχας οὐ λόγῳ διαιρετάς.

2. Retranslate into Greek:—

Because we take a lower ground in our contract-suits with the allies, and because we make decisions in our own courts on the footing of equal laws, we are thought to be litigious. And no one of them considers why it is that this reproach is not brought against those who have empire in any other quarter also, and are less moderate towards their subject-allies than we: for those who are able to act with force, have no additional need of appealing to justice. But they, from having been accustomed to hold intercourse with us on a fair footing, if contrary to their notions of right they have been placed in an inferior position, in any way whatever, either by a judicial decision, or by the power which our empire confers on us, feel no gratitude at not being deprived of the greater part (of their possessions), but are more indignant at what they lose, than if from the first we had laid aside all law and openly taken advantage of them.

3. Translate into Iambic verse:—

Have I a tongue to doom my brother's death,
And shall that tongue give pardon to a slave?
My brother kill'd no man, his fault was thought,
And yet his punishment was bitter death.
Who sued to me for him? Who, in my wrath,
Kneel'd at my feet, and bade me be advised?
Who spoke of brotherhood! Who spoke of love?
Who told me how the poor soul did forsake
The mighty Warwick, and did fight for me?

JUNIOR GREEK CLASS.

Translate:—

(A).—EURIPIDES—*Ion*, vv. 645-668.

οἱ τὰς πόλεις ἔχουσι κἀξιώματα
τοῖς ἀνθαμίλλοις εἰσὶ πολεμιώτατοι.
ἐλθὼν δ' ἐς οἶκον ἀλλότριον ἔπηλυς ὢν
γυναῖκά θ' ὡς ἄτεκνον, ἢ κοινουμένη
τὰς συμφορὰς σοι πρόσθεν, ἀπολαχοῦσα νῦν
αὐτὴ καθ' αὑτὴν τὴν τύχην οἴσει πικρῶς,
πῶς δ' οὐχ ὑπ' αὐτῆς εἰκότως μισήσομαι,
ὅταν παραστῶ σοὶ μὲν ἐγγύθεν ποδός,
ἡ δ' οὖσ' ἄτεκνος τὰ σὰ φίλ' εἰσορᾷ πικρῶς;
κᾆτ' ἢ προδοὺς σύ μ' ἐς δάμαρτα σὴν βλέψῃς
ἢ τἀμὰ τιμῶν δῶμα συγχέας ἔχῃς;
ὅσας σφαγὰς δὴ φαρμάκων θανασίμων
γυναῖκες εὗρον ἀνδράσιν διαφθοράς!
ἄλλως τε τὴν σὴν ἄλοχον οἰκτείρω, πάτερ,
ἄπαιδα γηράσκουσαν· οὐ γὰρ ἄξία
πατέρων ἀπ' ἐσθλῶν οὖσ' ἀπαιδίαν νοσεῖν.
τυραννίδος δὲ τῆς μάτην αἰνουμένης
τὸ μὲν πρόσωπον ἡδύ, τὰν δόμοισι δὲ
λυπηρά· τίς γὰρ μακάριος, τίς εὐτυχὴς
ὅστις δεδοικὼς καὶ περιβλέπων βίαν
αἰῶνα τείνει; δημότης ἂν εὐτυχὴς
ζῆν ἂν θέλοιμι μᾶλλον ἢ τύραννος ὤν,
ᾧ τοὺς πονηροὺς ἡδονὴ φίλους ἔχειν.
ἐσθλοὺς δὲ μισεῖ κατθανεῖν φοβούμενος.

1. *a.* ἐς οἶκον—ὡς γυναῖκα; account for the employment of ἐς and ὡς in these two constructions. *b.* Supply the ellipsis after ἀπολαχοῦσα, v. 649. *c.* What is the government of φαρμάκων, v. 656, and of ἀπαιδίαν, v. 660? *d.* What is the construction of ὦ, v. 667? *e.* Account for the repetition of ἂν, in verses 665, 666.

2. Give the derivation or composition of ἀνθάμιλλος, ἔπηλυς, σφαγή, εἰκότως, βλασφημία.

3. Parse *fully* παραστῶ, εἰσορᾷ, κᾆτ', συγχέας, τἀν, κατθανεῖν, ἤμπισχεν, ἀνεῖσαν, παρείς.

4. Define the term *cæsura*, and point out the principal cæsuras in the first three lines of the extract.

(B.)—1. Punctuate, accentuate, and translate the following passage:—
Ετυγχανον λεγων οτι πολλαι και καλαι ελπιδες ημιν ειεν σωτηριας πρωτον μεν γαρ ημεις μεν εμπεδουμεν τους των θεων ορκους οι δε πολεμιοι επιωρκησασι τε και τας σπονδας και τους ορκους λελυκασιν ουτω δε εχοντων εικος τοις μεν πολεμιοις εναντιους εινάι τους θεους ημιν δε συμμαχους.

2. *a.* Write down all the persons of ἐμπεδοῦμεν in the contracted forms. *b.* Derive σπονδή and ὅρκος, and distinguish between σπονδή and σωονδαί.

Appendix B.

Selection of Papers used at the Sessional Examinations.

(C.)—Translate into Greek:—

1. He took pleasure in doing kind offices to his friends.
2. A dog was pursuing a man, and he took refuge in a house.
3. The horse has very beautiful ears.
4. The Greeks of that day fought against the Persians.
5. If my brother had had three horses, he would have given one of them to his father.
6. If we have money we shall have friends.
7. I should like to see the cavalry of the Persians charging the Greeks.
8. But for the swiftness of their feet, the men would not have escaped; for the others pursued at full speed.

3RD YEAR'S GREEK CLASS.

1. In what year was the *Agamemnon* first represented, and what were the remaining pieces in the Tetralogy to which it belonged? Of whom did the chorus consist?

2. Translate the following sentences, adding such comments as you may think necessary:—

a. Τὰ δεσποτῶν γὰρ εὖ πεσόντα θήσομαι
πρὶς ἓξ βαλούσης τῆσδε μοι φρυκτωρίας.

b. Κεδνὸς δὲ στρατόμαντις ἰδὼν δύο λήμασιν ἴσους
Ἀτρεΐδας μαχίμους ἐδάη λαγοδαίτας
πόμπους τ' ἀρχάς.

c. Σὺ δ' εἴ τι κεδνὸν εἶπε μὴ πεπυσμένη
Εὐαγγέλοισιν ἐλπίσιν θυηπολεῖς,
Κλύοιμ' ἂν εὔφρων· οὐδὲ σιγώσῃ φθόνος.

d. Νικᾷ δ' ὁ πρῶτος καὶ τελευταῖος δραμών,

e. . . . . . οὐκ ἔφα τις
θεοὺς βροτῶν ἀξιοῦσθαι μέλειν
Ὅσοις ἀφίκτων χάρις
παροῖθ'· ὁ δ' οὐκ εὐσεβής.

f. Ὀμμάτων δ' ἐν ἀχηνίαις
ἔρρει πᾶσ' Ἀφροδίτα.

g. Τὸ δ' ὑπερκόπως κλύειν εὖ
βαρύ·

h. Ἰλίῳ δ' κῆδος ὀρ-
θώνυμον τελεσσίφρων
Μῆνις ἤλασεν, τραπέζας ἀτι-
μώσιν ὑστέρῳ χρόνῳ
καὶ Συνεστίου Διὸς
ἁρασσομένα τὸ νυμφότιμον
μέλος ἐκφάτως ἰόντας,
Ὑμέναιον, ὃς τοτ' ἐπέρρεπεν
Ῥαμβροῖσιν ἀείδειν

i. . . . . . ἐγὼ δ' οὖν
ἐθέλω δαίμονι τῷ Πλεισθενιδῶν
ὅρκους θεμένη τάδε μὲν ἀπέργειν,
δύστλητά περ ὄνθ'· ὃ δὲ λοιπόν, ἰόνθ'
ἐκ τῶνδε δόμων ἄλλην γενέαν
πρίβειν θανάτοις ἀϋθένταισιν.

ὅσπις δ' ἀγαθὸς προβατευγνώμων
οὐκ ἔστι λαθεῖν ὄμματα φωτὸς
τὰ δοκοῦντ' εὔφρονος ἐκ διανοίας
ὑδαρεῖ σαίνειν φιλότητι.

3. Derive and explain the following words:—*ἄγκαθεν, προτέλεια, τριακτήρ, ρῦσιον, πρόδικος, ἔρμα, ἅπαξ, βουκολέω, τριτόσπονδος, παράσημος, καινίζω, ἐπίξηνον, θριγκός.*

4. Explain the following terms:—*πρόλογος, πάροδος, ἐπεισόδιον, στάσιμον, ἔξοδος κόμμος.*

5. Explain the following expressions:—*προβουλόπαις ἄφερτος ἄτας—ἀντήνωρ ἀποδάς—παλιντυχής τριβὴ βίου—ἐν ψήφῳ λέγειν—ἀπομούσως γράφεσθαι—πρόβουλος ἔμβασις ποδός.*

6. Draw a parallel between the characters of Clytæmnestra and Lady Macbeth.

Translate into Iambic verse:—

Brakenbury. Why looks your grace so heavily to-day?
Clarence. O, I have passed a miserable night,
So full of fearful dreams, of ugly sights,
That, as I am a Christian faithful man,
I would not spend another such a night,
Though 'twere to buy a world of happy days:
So full of dismal terror was the time.
Brakenbury. What was your dream, my lord? I pray you tell me.
Clarence. Methought that I had broken from the Tower,
And was embark'd to cross to Burgundy;
And in my company my brother Gloster;
Who from my cabin tempted me to walk
Upon the hatches.

SENIOR GREEK CLASS.

1. Name the extant plays of Sophocles. Where is the scene of the *Philoctetes* laid, and in what year was it first represented? Of whom did the chorus consist?

2. Translate the following passages, adding such comments as you may think necessary:—

a. νῦν μὲν ἴσως γὰρ τόπον ἐσχαπαῖς
προσιδεῖν ἐθέλεις ὄντινα κεῖται,
δέρκου θαρσῶν·
ὅποταν δὲ μόλῃ δεινὸς ὀδίτης,
πρὸς ἐμὴν αἰεὶ χειρα προχώρων
πειρῶ τὸ παρὸν θεραπεύειν.

b. . . . . προυφάνη κτύπος,
φωτὸς σύντροφος ὡς τειρομένου του,
ἢ που τῇδ' ἢ τῇδε πόπων.

c. εὖ γ', ὦ τέκνον· τίνος γὰρ ὧδε τὸν μέγαν
χόλον κατ' αὐτῶν ἐγκαλῶν ἐλήλυθας;

d. ἐγὼ μέν, ὦ γένεθλον Θίταιου πατρός,
τὸ λοιπὸν ἤδη τηλόθεν τό τ' Ἴλιον
καὶ τοὺς Ἀτρείδας εἰσορῶν φυλάξομαι.

e. Ἐγὼ μὲν ἤδη καὶ πάλαι νεὼς ὁμοῦ
στείχων ἂν ἦν σοι τῆς ἐμῆς, εἰ μὴ πέλας
Ὀδυσσέα στείχοντα τὸν τ' Ἀχιλλέως
γόνον πρὸς ἡμᾶς δεῦρ' ἴοντ' ἐλεύσσομεν.

Appendix B.

Selection of Papers used at the Sessional Examinations.

3. Define the terms ἐπεισόδιον, πάροδος, ἔξοδος, στάσιμον, κόμμος; and explain the expressions χόρον δίδοναι, and θεὸς ἐκ μηχανῆς.

4. Punctuate, accentuate, and translate the following passage :—

μη δητα τουτογ' αλλα μοι τα τοξ' ελων
ταδ' ωσπερ ητου μ' αρτιως εως ανη
το πημα τουτο της νοσου το νυν παρον
σωζ' αυτα και φυλασσε

5. Translate :—

HOMER, Book XVIII., vv. 490–508.

Ἐν δὲ δύω ποίησε πόλεις μερόπων ἀνθρώπων
καλάς. ἐν τῇ μέν ῥα γάμοι τ' ἔσαν εἰλαπίναι τε,
νύμφας δ' ἐκ θαλάμων δαΐδων ὕπο λαμπομενάων
ἠγίνεον ἀνὰ ἄστυ, πολὺς δ' ὑμέναιος ὀρώρει·
κοῦροι δ' ὀρχηστῆρες ἐδίνεον, ἐν δ' ἄρα τοῖσιν
αὐλοὶ φόρμιγγές τε βοὴν ἔχον· αἱ δὲ γυναῖκες
ἱστάμεναι θαύμαζον ἐπὶ προθύροισιν ἑκάστη.
λαοὶ δ' εἰν ἀγορῇ ἔσαν ἀθρόοι· ἔνθα δὲ νεῖκος
ὠρώρει, δύο δ' ἄνδρες ἐνείκεον εἵνεκα ποινῆς
ἀνδρὸς ἀποφθιμένου· ὁ μὲν εὔχετο πάντ' ἀποδοῦναι,
δήμῳ πιφαύσκων, ὁ δ' ἀναίνετο μηδὲν ἑλέσθαι·
ἄμφω δ' ἰέσθην ἐπὶ ἴστορι πεῖραρ ἑλέσθαι.
λαοὶ δ' ἀμφοτέροισιν ἐπήπυον, ἀμφὶς ἀρῆγοί·
κήρυκες δ' ἄρα λαὸν ἐρήτυον· οἱ δὲ γέροντες
εἵατ' ἐπὶ ξεστοῖσι λίθοις ἱερῷ ἐνὶ κύκλῳ,
σκῆπτρα δὲ κηρύκων ἐν χέρσ' ἔχον ἠεροφώνων·
τοῖσιν ἔπειτ' ἤϊσσον. ἀμοιβηδὶς δὲ δίκαζον.
κεῖτο δ' ἄρ' ἐν μέσσοισι δύω χρυσοῖο τάλαντα,
τῷ δόμεν ὃς μετὰ τοῖσι δίκην ἰθύντατα εἴποι.

1. What is the argument of the *Iliad*, and what space of time does its action occupy? What is meant by unity of plot in a poem?

2. Insert the digamma, where necessary, in the above extract, stating your reasons for so doing.

3. Derive and explain the terms ῥαψῳδός and στιχῳδός.

4. Give the meaning and derivation of the following words:—διακριδόν, πρόθυρον, φασσόφονος, ὀλιγηπελέω, ἀοσσητήρ, ἠϋγένειος, κατενῶπα, ἄθυρμα, πολύπυρος, ἰοδόκος, ἠλίβατος.

4. Explain the following grammatical forms :—δεικανόωντο, πεφήσεται, ἄνωχθι, ἔμμορε, πεπρωμένον, πεφιδήσεται, ἐϋῤῥεῖος, εἱμένος ἀκαχμένος, γέντο. Distinguish between σφωέ, σφῶϊ, σφωΐν, σφῶϊν; also between ἴός, ἴος, and ἰόν; εἶπε and εἰπέ; εἶπον and εἰπόν; αἵμων and αἷμων; ἔργω and εἴργω; Ὅμηρος and ὅμηρος.

JOHN RYALL, *Examiner.*

THIRD YEAR'S AND SENIOR LATIN CLASSES.

Translate into Elegiac verse :—

But lo! from high Hymettus to the plain,
The queen of night asserts her silent reign.
No murky vapour, herald of the storm,
Hides her fair face, nor girds her glowing form;
With cornice glimmering as the moonbeams play,
There the white column greets her grateful ray,
And, bright around with quivering beams beset,
Her emblem sparkles o'er the minaret.

Translate into Latin prose:—

I can stifle any violent inclination, and oppose a torrent of anger, or the solicitations of revenge with success. Indolence is a stream which flows slowly on, but yet undermines the foundation of every virtue. A vice of a more lively nature were a more desirable tyrant than this rust of the mind, which gives a tincture of its nature to every action of one's life. It were as little hazard to be tossed in a storm as to be thus perpetually becalmed: and it is to no purpose to have within one the seeds of a thousand good qualities, if we want the vigour and resolution necessary for the exerting them.

JUNIOR LATIN CLASS.

Translate:—

LIVY, xxiii., 6.

Hac oratione consulis dimissis redeuntibusque domum legatis unus ex his Vibius Virrius tempus venisse ait, quo Campani non agrum solum ab Romanis quondam per iniuriam ademptum recuperare, sed imperio etiam Italiæ potiri possint. Foedus enim cum Hannibale quibus velint legibus facturos; neque controversiam fore, quin, cum ipse confecto bello Hannibal victor in Africam decedat exercitumque deportet, Italiae imperium Campanis relinquatur. Haec Virrio loquenti adsensi omnes ita renuntiant legationem, uti deletum omnibus videretur nomen Romanum. Extemplo plebes ad defectionem ac pars maior senatus spectare.

HORACE—*Satires*, II., 2, 70–81.

Accipe nunc, victus tenuis quae quantaque secum
Adferat. In primis valeas bene: nam variae res
Ut noceant homini, credas, memor illius escae,
Quae simplex olim tibi sederit: at simul assis
Miscueris elixa, simul conchylia turdis,
Dulcia se in bilem vertent, stomachoque tumultum
Lenta feret pituita. Vides, ut pallidus omnis
Coena desurgat dubia? Quin corpus onustum
Hesternis vitiis animum quoque praegravat una,
Atque adfigit humo divinae particulam aurae.
Alter, ubi dicto citius curata sopori
Membra dedit, vegetus praescripta ad munia surgit.

1. Give an account of the life of Horace, and confirm your statements by quotations from his writings.
2. Derive the words *pulmentum, recalcitro, abnormis, austerus, lethargicus,* and *esurio.*
3. What is the date of the battle of Cannæ?
4. Characterize the style of Livy, and give examples.
5. Describe accurately the situation of Capua, Canusium, and Venusia.

Translate into Latin:—

I ask you to do this.
I asked you to do this.
Strive to assist me.
He is striving to govern the winds and seasons.
He warned Cæsar not to believe the Gauls.
Do not believe the Gauls.
Do not lie.
Religion warns men not to lie.

Appendix B.

Selection of Papers used at the Sessional Examinations.

It is certain that the boy is striving to learn.
I will exhort the boy to learn.
We know that virtue and vice are contrary to each other.

Translate into Latin Elegiacs:—

Nor however sometimes let me be ashamed to hold a hoe,
Or with a goad to have chidden the slow oxen,
Let it not be irksome to bring back home either a ewe-lamb in my bosom, or the offspring of a goat
Deserted, its mother having forgotten it,
I myself will plant vines, and lay out hills in order,
Which no beasts may crop, I watching them.

SENIOR LATIN CLASS.

Translate:

JUVENAL, xi., 65–81.

De Tiburtino veniet pinguissimus agro
Haedulus et toto grege mollior, inscius herbae,
Necdum ausus virgas humilis mordere salicti,
Qui plus lactis habet quam sanguinis, et montani
Asparagi, posito quos legit vilica fuso;
Grandia praeterea tortoque calentia foeno
Ova adsunt ipsis cum matribus et servatae
Parte anni, quales fuerant in vitibus, uvae,
Signinum Syriumque pirum, de corbibus isdem
Aemula Picenis et odoris mala recentis,
Nec metuenda tibi, siccatum frigore postquam
Autumnum et crudi posuere pericula succi.
Haec olim nostri iam luxuriosa senatus
Coena fuit: Curius, parvo quae legerat horto,
Ipse focis brevibus ponebat oluscula, quae nunc
Squalidus in magna fastidit compede fossor,
Qui meminit, calidae sapiat quid vulva popinae.

CICERO—*De Officiis*, I., 22, § 77.

Illud autem optimum est, in quod invadi solere ab improbis et invidis audio:

Cedant arma togae, concedat laurea laudi.

Ut enim alios omittam, nobis rem publicam gubernantibus nonne togae arma cesserunt? Neque enim periculum in re publica fuit gravius umquam nec maius otium. Ita consiliis diligentiaque nostra celeriter de manibus audacissimorum civium delapsa arma ipsa ceciderunt. Quae res igitur gesta umquam in bello tanta? qui triumphus conferendus? Licet enim mihi, Marce, fili, apud te gloriari, ad quem et hereditas huius gloriae et factorum imitatio pertinet. Mihi quidem certe vir abundans bellicis laudibus, Cn. Pompeius, multis audientibus, hoc tribuit, ut diceret frustra se triumphum tertium deportaturum fuisse, nisi meo in rem publicam beneficio ubi triumpharet esset habiturus.

1. Notice some modern imitations of Juvenal.
2. Criticise Juvenal's account of Demosthenes.
3. Describe accurately the situation of Gades, Capreæ, Minturnæ, Syene, Mycenæ, and Seriphus.
4. Quote or refer to the passages in Cicero's letters where he mentions his treatise *De Officiis*.
5. "Mediocritatem illam tenebit, quæ est inter nimium et parum, quæ placet Peripateticis."—Explain fully the allusion in these words.

Translate into Latin :—

Does not friendship stand before relationship ?—Yes, certainly ; but he neglected no particular of duty.

Did he then lay no traps for you ?—Nay, he laid many, but I easily avoided them all.

What if a father shall endeavour to betray his country ? Shall a son say nothing ?—Nay, he will beseech his father not to do that.

Translate into Sapphics :—

O river, every leaf in the thick wood feels thy force, and with trembling motion confesses that thou art the lord of the valley, of the beautiful valley.

The caves answer the leaves; and the tower which long age has cemented resounds the same with accordant voice, and trembles from its lowest base.

But thy course is through beautiful fields, and in proportion as thou art deservedly called strong, so thou flowest with easy course, and with a wave bounteous to all.

THIRD YEAR'S LATIN CLASS.

Translate :—

LUCRETIUS, ii., 795–809.

Praeterea quoniam nequeunt sine luce colores
Esse, neque in lucem existunt primordia rerum,
Scire licet quam sint nullo velata colore :
Qualis enim caecis poterit color esse tenebris ?
Lumine quin ipso mutatur propterea quod
Recta aut obliqua percussus luce refulgit ;
Pluma columbarum quo pacto in sole videtur,
Quae sita cervices circum collumque coronat :
Namque alias fit uti claro sit rubra pyropo.
Interdum quodam sensu fit uti videatur
Inter curalium viridis miscere zmaragdos.
Caudaque pavonis, larga cum luce repleta est,
Consimili mutat ratione obversa colores ;
Qui quoniam quodam gignuntur luminis ictu,
Scire licet, sine eo fieri non posse putandum est.

TACITUS—*Histories*, ii., 76.

His pavoribus nutantem et alii legati amicique firmabant et Mucianus, post multos secretosque sermones iam et coram ita locutus : "omnes qui magnarum rerum consilia suscipiunt, aestimare debent an quod inchoaturi rei publicae utile, ipsis gloriosum, aut promptum effectu, aut certe non arduum sit. Simul ipse qui suadet considerandus est, adiciatne consilio periculum suum, et si fortuna coeptis adfuerit, cui summum decus adquiratur. Ego te, Vespasiane, ad imperium voco tam salutare rei publicae quam tibi magnificum. Iuxta deos in tua manu positum est. Nec speciem adulantis expaveris. A contumelia quam a laude propius fuerit post Vitellium eligi. Non adversus divi Augusti acerrimam mentem, nec adversus cautissimam Tiberii senectutem, ne contra Gai quidem aut Claudii vel Neronis fundatam longo imperio domum exsurgimus. Cessisti etiam Galbae imaginibus. Torpere ultra, et polluendam perdendamque rem publicam relinquere, sopor et ignavia videretur, etiam si tibi quam inhonesta, tam tuta servitus esset. Abiit iam et transvectum est tempus, quo posses

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videri concupisse: confugiendum est ad imperium. An excidit trucidatus Corbulo? Splendidior origine quam nos sumus, fateor: sed et Nero nobilitate natalium Vitellium anteibat.

1. Mention some words occurring in Lucretius which are rarely used by other writers.
2. What were the opinions of Lucretius concerning the gods?
3. How was Cybele represented by the ancient artists?
4. Describe some coins which illustrate the history of Vespasian's reign.
5. When did Tacitus flourish? Name his most celebrated contemporaries.
6. Give examples of the peculiar manner in which Tacitus uses the genitive case.

B. LEWIS, *Professor.*

HISTORY.

General Questions—

1. What is history?
2. Distinguish between written and unwritten historical evidence.

European History—

3. Trace the genealogy of Charlemagne from Pepin of Landis.
4. Trace the rise and progress of the Feudal system in Europe. At what time was that system at its height?
5. What caused the decline of the Feudal System? Characterize the state of Europe in the period A.D. 1200–1500.
6. Narrate the principal events in the first three Crusades.
7. State the claim of Edward III. to the throne of France.
8. What were the leading articles in the Peace of Bretigni?
9. Give an account of the battle of Azincourt.
10. What were the terms of the Treaty of Troyes?

English History—

11. Mention the most remarkable assertions of liberty, from Magna Charta to the Act of Settlement. Discuss more particularly the Petition of Right, and the Bill of Rights.
12. Enumerate Marlborough's victories, with the dates.
13. Discuss the measures taken in reference to the Union with Scotland; mention the leading articles of the Union; and review the state of feeling in Scotland.
14. Give a brief account of the War of Succession in Spain.
15. State the arguments for and against the Treaty of Utrecht.
16. Write a short life of Warren Hastings.
17. Discuss the measures taken in reference to the Union with Ireland, and mention the leading articles of the Union.

ENGLISH LANGUAGE.

1. What is the testimony of Cæsar and of Tacitus respecting the early inhabitants of Britain?
2. Give some account of the Anglo-Saxon invasion of Britain. In what districts did the various invading tribes settle?
3. What was the Danelagh?
4. Describe the effects produced by the Norman Conquest of England, particularly with regard to the language of the country.

5. What was the Latin of the First and Second Periods? Give examples.

6. When did the use of the French language cease in the schools, and in the courts of law?

7. What does Robert of Gloucester say on the use of French and English, and about the classes speaking those languages in the country?

SHAKESPEARE'S "KING JOHN."

8. Explain the following passages:—

(*a.*) He hath a *trick* of Cœur-de-lion's face.

(*b.*) . . . . . my face so thin,
That in mine ear I durst not stick a rose,
Lest men should say, Look where three farthings goes!

(*c.*) Be pleased then
To pay that duty which you truly *owe*,
To him that *owes* it, namely, this young prince.

(*d.*) Imprisoned *angels*
Set at liberty.

(*e.*) Hadst not thou been by,
A fellow by the hand of nature marked,
Quoted and *signed*, to do a deed of shame,
This murder had not come into my mind.

(*f.*) Even as a form of wax
Resolveth from his figure 'gainst the fire.

ENGLISH LITERATURE.

1. Sketch the plan of Chaucer's Canterbury Tales. Remark upon the poetic genius of Chaucer.

2. Characterize the poetry of Spenser. Explain the Spenserian stanza.

3. Trace the rise and progress of the European drama. Explain the terms—*miracles, mysteries, moralities, interludes,* and *masques.*

4. Contrast the Classical and the Romantic schools in English dramatical literature.

5. Characterize the prose style of Bacon.

6. Divide Milton's literary career into three parts, giving an account of the works which he produced in each.

7. Review Dryden's satirical and didactic poems. Show that a strong point in Dryden's genius was his power of "reasoning in verse."

8. Consider Dryden and Pope as representatives of the Correct School in English poetry.

9. Review Pope's "Rape of the Lock."

10. Comment upon the following passages:—

(*a.*) If it were done, when 'tis done, then 'twere well
It were done quickly. If the assassination
Could trammel up the consequence, and catch
With his surcease, success; that but this blow
Might be the be-all and the end-all here;
But here, upon this bank and shoal of time,
We'd jump the life to come.

(*b.*) If it be so,
For Banquo's issue have I filed my mind,
For them the gracious Duncan have I murdered;
Put rancours in the vessel of my peace,

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Only for them; and mine eternal jewel
Given to the common enemy of man,
To make them kings, the seed of Banquo kings!
Rather than so, come, fate, into the list,
And champion me to the utterance.

(*c*) Come, seeling night,
Scarf up the tender eye of pitiful day.

(*d*.) What man dare, I dare:
Approach thou like the rugged Russian bear,
The armed rhinoceros, or the Hyrcan tiger,
Take any shape but that, and my firm nerves
Shall never tremble; or, be alive again,
And dare me to the desert with thy sword;
If trembling I inhabit, then protest me
The baby of a girl.

WM. RUSHTON, *Professor.*

MODERN LANGUAGES.

I.

Translate into French:—

Aristides, while in exile, proved that not he, but those who banished him, were the enemies of the state; for when he ascertained that the Persian fleet was so large that the Greeks could not escape, he went over to Salamis, and reported the fact, in order that they might act to more advantage. This, however, he would never have done, had he thought more of the enmity of Themistocles than of the safety of his country. The Athenians would not permit the increase of the Spartan interest, nor the Spartans that of the Athenians; but, probably, had they known that Philip of Macedon was plotting against their liberties, they would not have suffered his power to increase, but would have combined their forces and taken the field against the common enemy.

II.

In the reign of Charles II. the coffee-houses of London were the chief organs through which the public opinion of the metropolis vented itself. Every man of the upper or middle class went daily to his coffee-house to learn the news and to discuss it. Every coffee-house had one or more orators to whose eloquence the crowd listened with admiration, and who soon became, what the journalists of our time have been called, a fourth estate of the realm. Nobody was excluded from those places who laid down his penny at the bar. Yet every rank and profession, and every shade of religious and political opinion, had its own head-quarters. There were houses near St. James's Park where fops (Geden) congregated, their heads and shoulders covered with black or flaxen wigs, not less ample than those which are now worn by the Chancellor and by the Speaker of the House of Commons. The atmosphere was like that of a perfumer's shop. Tobacco, in any other form than that of richly scented snuff, was held in abomination. If any clown (Rude), ignorant of the usages of the house, called for a pipe, the sneers of the whole assembly and the short answers of the waiters soon convinced him that he had better go somewhere else. Nor indeed would he have had far to go, for, in general, the coffee-houses reeked with tobacco like a guard-room (Wachtstube); and strangers sometimes expressed their surprise that so many people should leave their own firesides to sit in the midst of eternal fog and stench.—*Macaulay.*

1. How do the French express such sentences as these?—He is to read.—I have just seen the queen.—The prince has just past.—You should have stopped.

2. Give the principal rules on the use of the subjunctive mood, in French, and illustrate them by examples.

3. When is the negative *ne* applied without there being a corresponding negative in English? Give examples.

4. State the use of the Imperfect and of the Preterite, in French, comparing them to the Latin. Give examples.

5. Mention some of the French Onomatopœia.

6. State what you know of the life and works of Racine.

7. Characterize his tragedy of *Athalie*.

8. Which are considered Corneille's best plays.

9. Characterize the Cid and Cinna.

10. Which are the fundamental differences between the English drama as represented by Shakespere, and that of France as represented by Corneille and Racine.

R. DE VERICOUR.

MATHEMATICS.

1. Define parallel lines. Sketch Euclid's reasoning on their elementary theory, noting particularly where the twelfth axiom appears.

2. Describe a triangle of which the sides shall be equal to three given straight lines, but any two whatever of these must be greater than the third. At what point in the construction is the above condition implied?

3. Divide a given straight line into two parts, so that the rectangle contained by the whole line and one of the parts may be equal to the square on the other part.

4. The straight line drawn at right angles to the diameter of a circle from the extremity of it falls without the circle; and no straight line can be drawn from the extremity between that straight line and the circumference so as not to cut the circle.

Chords of a circle are drawn through a fixed point inside it: prove that the middle point of the complete chord always lies on a circle (C), and that the middle points of the two segments always lie on another circle concentric with (C).

5. The sides about the equal angles of equiangular triangles are proportionals, and those which are opposite to the equal angles are homologous.

6. Prove that $x^m \div x^n = x^{m-n}$, m and n being positive integers of which m is the greater.

Prove that $(a+b+c)^3=(-a+b+c)^3+(a-b+c)^3+(a+b-c)^3+24\,abc$.

and divide x^2-8y by $x^3-\sqrt{2x^3y^3}+2y^3$.

7. Reduce to its lowest terms $\dfrac{2x^5-61x^2+63}{10x^6-91x^4+81}$, and add together $\dfrac{2}{x^2+x-2}$, $\dfrac{-3}{x^2-4}$, $\dfrac{5}{x^2-x-2}$.

8. Solve the equations—

1°. $\dfrac{x+1}{x-2}+\dfrac{x-2}{x+1}=\dfrac{x+2}{x-3}+\dfrac{x-3}{x+2}$.

2°. $\begin{cases} -x+2y+5z=20 \\ 3x-5y-7z=-23 \\ 4x-7y+3z=32 \end{cases}$

3°. $\begin{cases} x^4+y^4=97 \\ x-y=-1 \end{cases}$

AppendixB. Selection of Papers used at the Sessional Examinations.

9. If $a+\sqrt{x}=b+\sqrt{y}$ where a and b are rational, and $\sqrt{x}$ and $\sqrt{y}$ surds, prove that $a=b$ and $x=y$.

Extract the square root of $1-\frac{1}{5}\sqrt{24}$.

10. Define and find the sum to n terms of a geometric series. Under what circumstances can you find a limit to the sum of an infinite number of terms of such a series.

Sum the series 1°. $\frac{5}{8}+1+\frac{11}{8}+\ldots$ to 40 terms.

2°. $1\frac{1}{2}+3\frac{1}{4}+5\frac{1}{8}+\ldots$ to n terms.

and show that $(6-2\sqrt{3})+(4\sqrt{3}-6)+(9-5\sqrt{3})+\ldots$ to $\infty=4$.

11. Prove that $\log_a b=\frac{\log_c b}{\log_c a}$

Explain the advantages possessed by the common system of logarithms for practical calculations.

Given $\left(\frac{3}{4}\right)^{\frac{100}{x}}=\frac{4}{5}$, $\log_{10} 2=\cdot3010300$, $\log_{10} 3=\cdot4771213$, find x correct to 3 decimal places.

12. Assuming that the circumferences of circles vary as their radii, prove that the circular unit is a definite angle.

13. Prove that $\cot(3\,.\,180°+A)=\cot A$.

If $\tan\theta=-(2\sqrt{3})$ prove that $\theta=\frac{\pi}{12}(12n+7)$. Find also the tangent of 1560°.

14. Prove that 1°. $\cos\overline{A+B}=\cos A\cos B-\sin A\sin B$.

2°. $\sin\overline{A+B}+\cos\overline{A-B}=2\cos\left(\frac{\pi}{4}-A\right)\cos\left(\frac{\pi}{4}-B\right)$

15. Prove that in any triangle $\sin A:\sin B:\sin C::a:b:c$. Illustrate geometrically the ambiguous case in the solution of triangles. Lines are drawn through the angles of a triangle, making the same angle θ with the opposite sides (θ being measured always on the same side of the lines); prove that these lines form a triangle similar to the original, and having each side to one in it as $2\cos\theta:1$.

Additional Questions to be taken into account in deciding the Prizes.

1. A straight line AB is divided in C; upon AC, CB, and on the same side of it, are described segments of circles containing angles which are supplementary; CP, drawn perpendicular to AB, meets the semicircle on AB as diameter (and on the same side of it as the two segments) in P; AP, BP, meet the segments in Q and R; prove that CQ is perpendicular to CR, and that QR touches both the segments.

2. If $a:a_1::a_1:a_2::a_2:a_3\ldots$ prove that

$$\left(\frac{a_p}{a_q}\right)^{\frac{1}{p-q}}=\left(\frac{a_r}{a_s}\right)^{\frac{1}{r-s}}$$

$$\left(\frac{a^q_p}{a^p_q}\right)^{\frac{1}{p-q}}=\left(\frac{a^s_r}{a^r_s}\right)^{\frac{1}{r-s}}$$

3. Find the coefficient of x^{2n} in the expansion of $\frac{1}{(x+2)^3(x^2+2)}$

4. If $u_n=\frac{(-1)^n 3^n \lfloor r+n-1}{\lfloor 2n \lfloor r-n}$ prove that

$u_1+u_2+u_3+\ldots+u_r=0$ if r be a multiple of 3.

$=\frac{-3}{2r}$ if it be not a multiple of 3.

5. Prove that $\sin\theta \cdot \sin\left(\frac{\pi}{5}-\theta\right)\sin\left(\frac{\pi}{5}+\theta\right)\sin\left(\frac{2\pi}{5}-\theta\right)\sin\left(\frac{2\pi}{5}+\theta\right) = \frac{1}{16}\sin 5\theta$.

J. NIVEN.

MATHEMATICS.

1. Prove that the sines of the angles of a triangle are proportional to the sines of the opposite sides.

2. There are two isosceles spherical triangles; in one of them each of the equal sides is $\frac{\pi}{6}$, and the included angle $\frac{2\pi}{3}$, and in the other each of the equal sides is $\frac{\pi}{3}$, and the included angle is $\frac{\pi}{3}$; prove that the third sides are equal.

3. Find the equation to a straight line in the form $\frac{x}{a}+\frac{y}{b}=1$. Find the equation to the line joining the points $(-2,+3)$ $(0,-1)$.

4. Determine the length of, and the equation to the line through $(-1, 0)$ perpendicular to $3x-2y=5$.

Investigate what is represented by the equation $r^2+\theta^2-2cr+c^2=0$.

5. Find the equation to the chord of contact of tangents to the circle $x^2+y^2=c^2$ from the point (h,k).

6. Find the equation to the normal at any point of an ellipse.

Prove that it cuts the line joining the foci into two parts, which are as the focal distances of the point on the curve through which the normal is drawn.

7. Investigate the equations to the asymptotes of the hyperbola

$$\frac{x^2}{a^2}-\frac{y^2}{b^2}=1.$$

Prove that the eccentricity of the curve is equal to the secant of half the angle between them.

8. Define a limit; assuming the value of $\frac{x^n-1}{x-1}$ when $x=1$, deduce the differential coefficient of x^n.

Differentiate $\frac{m^2x^2-n^2}{(1-x^2)^m}\log(\sec x)-\sec^2 x+\frac{\sec^4 x}{4}$.

9. State and prove Leibnitz's theorem.

If $y=(\sin^{-1}x)^2$, prove that

1. $(1-x^2)\frac{d^2y}{dx^2}-x\frac{dy}{dx}=2$.

2. $(1-x^2)\frac{d^{n+2}y}{dx^{n+2}}-x(2n+1)\frac{d^{n+1}y}{dx^{n+1}}-n^2\frac{d^ny}{dx^n}=0$.

10. Investigate the conditions for maxima and minima values of $\phi(x)$. *State* the complete rule when several differential coefficients of $\phi(x)$ vanish for the same value of x which makes $\phi'(x)=0$.

If $x^3+y^3-3axy=0$, prove that

y is a maximum and $=a\sqrt[3]{4}$ when $x=a\sqrt[3]{2}$,

and that x is a maximum and $=a\sqrt[3]{4}$ when $y=a\sqrt[3]{2}$.

Appendix B. — Selection of Papers used at the Sessional Examinations.

11. Prove that the sum of the maximum and minimum values of $x^3-6x^2+3x+21$ is 22.

12. Explain the terms "*multiple point*," "*point of inflexion*," "*point of osculation*," "*rhamphoid cusp*." Find the conditions that the curve $\phi(x,y)=0$ may have a double point at (α,β), and determine the equations to the tangents at this point.

The curve $(x^2+y^2)(x-a)^2=4a^2x^2$ has a double point at the origin, and the tangents make angles of 60° with the axis of x.

13. Define the "*circle of curvature*" and "*evolute*."

From the expressions for the co-ordinates of the centre of curvature,

$$2\alpha\frac{d^2x}{dy^2}=\frac{d^2r^2}{dy^2},\quad 2\beta\frac{d^2y}{dx^2}=\frac{d^2r^2}{dx^2},$$

find them corresponding to any point of an ellipse, and deduce its evolute.

14. Prove the formula for integration by parts, and integrate

$$\frac{1}{\sqrt{a^2+x^2}},\quad \frac{2x+1}{(x+1)^2(x^2+1)},\quad \sec^3x.$$

15. Show that the area of a plane curve between any two radii vectores is given in general by $\frac{1}{2}\int_\beta^\alpha r^2d\theta$.

Apply this to find the area subtended at the focus of a parabola by any arc.

Additional Questions to be taken into account in deciding the Prizes.

1. On a straight line passing through the centre of an ellipse, and at equal distances from the centre, are taken two points P,P′ from which tangents are drawn to the ellipse forming a parallelogram PQP′Q′.

Prove that—

1. PP′ and QQ′ form two conjugate diameters of the ellipse.
2. The lines joining the points of contact form a parallelogram whose sides are parallel to PP′ and QQ′.
3. The product of the area of this parallelogram and that of PQP′Q′, depends only on the area of the ellipse.

2. From two points B,C on the diameter of a circle whose centre is O, lines are drawn to any point P on the circumference of the circle. Prove that when PB+PC is a minimum—

$$PB=\sqrt{\frac{b}{c}(a^2+bc)},\quad PC=\sqrt{b(a^2+bc)}$$

where $OB=b$, $OC=c$, $OP=a$. [O is supposed to lie between B and C.]

Determine also where PB+PC is a maximum.

3. A series of ellipses is drawn touching a fixed right line. They have the same centre, and their principal axes coincide in direction. Prove that the polar of a fixed point with respect to them envelopes a parabola.

4. Evaluate $\int_{\sqrt{3}}^{\infty}\frac{\cot^{-1}x}{(1+x^2)^{\frac{1}{2}}}dx$, and find the area included between the curve $\sqrt[3]{\frac{x}{a}}+\sqrt[3]{\frac{y}{b}}=1$ and the positive directions of the co-ordinate axes.

Determine also the nature of the contact of the curve with the axes.

C. NIVEN.

Practical Mechanics and Theory of Steam Engines.

Prize Questions.

1. A cylinder weighing 100 lbs. turns upon a horizontal axis. Motion is communicated by a weight of 10 lbs. attached to a flexible string which is coiled round the surface of the cylinder. Find the space through which the weight will descend in ten seconds.

2. A body capable of turning on a given axis is struck by a blow at given magnitude along a line lying in a plane passing through the centre of gravity at right angles to the axis. The body being symmetrical with regard to this plane, how would you determine the impulse in the axis?

3. Investigate the relation between the resistance and the pressure which is on the point of urging forward an isosceles wedge.

4. Determine in general the plane down which a mass of loose earth, having one face vertical, must slide in order to produce the maximum horizontal pressure.

5. A body weighing 20 lbs. is tied to the end of a string, and suspended from a point which is carried round a curve of 1,000 feet radius, at the rate of fifteen miles per hour. Find the inclination of the string to the vertical.

6. A cylinder rolls down a rough inclined plane without any sliding motion. Investigate its motion.

7. In the steam engine prove that the maximum useful effect for a given evaporation is obtained when the pressure of the steam in the cylinder is a maximum.

Pass Questions.

1. What must be the horse-power of an engine that draws a weight of 150 tons along a horizontal road at the rate of 18 miles per hour, friction being 8lbs. per ton?

2. Assuming that the resistance of the air varies as the square of the velocity, show how to ascertain the maximum speed which a train can attain in moving down a given incline by the effect of its own weight.

3. In an ordinary roof show how to compute the horizontal strain on a tie connecting the feet of the rafters, or at any given distance from the ridge; also explain the effect of introducing a kingpost.

4. Investigate the condition of equilibrium of the screw, taking into account friction; also the effect of the friction on its end.

5. A wheel weighing four tons turns uniformly upon an axis whose radius is ·25 feet, and makes four revolutions per minute. Find the work consumed by friction per minute, the co-efficient of friction upon the axis being ·075.

6. A piece of iron weighing 100 lbs. is drawn along a horizontal plane of iron by means of a cord which is parallel to the plane, and to the end of which a weight of 10 lbs. is attached. Determine how far it will move in four seconds, friction of iron on iron = ·16.

7. Define the following terms: "moment of inertia," "radius of gyration," "centre of percussion."

8. Show how to estimate the amount of work accumulated in a given fly-wheel rotating with a given angular velocity.

9. Show how to determine the following quantities:—1. The volume of steam which can be got from a given quantity of water. 2. The amount of heat necessary to evaporate a given quantity of water.

10. Why does not Muriotte's law apply to the steam in its passage through the engine.

Appendix B.

Selection of Papers used at the Sessional Examinations.

11. Prove the following:—$av=\epsilon \mu_p S$.

12. In a locomotive how would you compute the resistance on the piston, knowing the resistance to the motion of the engine.

THIRD YEAR ENGINEERING—MATHEMATICAL PHYSICS.

1. Deduce the formula for determining the resultant of a system of parallel forces in the same plane, and thence establish the conditions of equilibrium of such a system.

2. A uniform rod rests wholly within a rough hemisphere in a vertical plane through its centre, prove that the limiting position of equilibrium is given by the equation $\tan\theta=\frac{\sin 2\phi}{2\cos(\beta+\phi)\cos(\beta-\phi)}$ where 2β is the angle it subtends at the centre, and ϕ the angle of friction.

3. Two inclined planes are placed back to back, two weights P and Q are placed on them connected by a string passing over the common vertex, find the relation between P and Q when in equilibrium, also the tension on the string, when there is not equilibrium.

4. With what velocity must a body be projected vertically upwards to rise to a height of 400 feet in two seconds?

5. A body is projected from a given point with a given velocity, determine the angle of projection in order that it should strike a given point.

6. Two balls whose elasticity is $\frac{5}{6}$, and masses as 2 : 1, move in opposite directions with velocities which are as 1 : 2; find the ratio of their velocities after impact, to what they were before.

7. A rectangle is immersed in a fluid so that two of its edges are parallel to the surface, and are at given depths below it; find the centre of pressure.

8. A pencil of light is incident directly on a plane refracting surface; prove that the ray which meets the surface at a distance y from the axis, if prolonged after refraction would meet the axis is given by the formula $v=\mu u+\frac{\mu^2-1}{\mu}\frac{y^2}{2u}$

9. At what distance from a convex lens must an object be placed that the image $=\frac{1}{4}$ object.

10. Find the sun's declination when for a place in a given latitude his mid-day altitude is known.

11. How would you determine the parts of the earth at which a given lunar eclipse would be visible, knowing the moon's declination and the Greenwich time at the beginning and ending of the eclipse.

12. Knowing the declination of a star and its altitude when in the prime vertical, determine the latitude of the place of observation.

Prize Questions.

1. Determine the centre of gravity of the portion of the area of the curve $y=\sin x$, between $x=o$, and $x=\pi$.

2. If the frustrum of a cone be bisected by a plane through its axis, prove that either half will just stand upon the smaller end on a horizontal plane if $\frac{h+h'}{h}=\pi\frac{h^3+hh'+h'^2}{h^3+h'^3}$ where h and h' are the heights of the smaller and larger cones, the difference of which constitutes the frustrum.

3. Investigate the form of a flexible string under the action of a central force.

4. A particle is placed at a given distance from a uniform thin plate of indefinite extent, every particle of which attracts with a force varying inversely as the square of the distance; find the time in which the particle will arrive at the surface of the plate.

5. A particle describes a curve about a centre of force, its velocity varies $\frac{1}{r^n}$; find the law of force.

6. Prove that time of a particle's sliding down any arc of a curve is given by the formula $t = \int_0^{y_1} \frac{\frac{ds^1}{dy}\, dy}{\sqrt{2g\,(y_1 - y)}}$

7. Investigate the form of the surface of a fluid mass rotating round any axis, and acted on by any forces.

8. Find the least distance between an object and its image formed by a convex lens.

9. Prove that in a lens chromatic aberration $= \frac{\pi v^2}{f}$ where π is dispersive power.

10. If r be the horizontal refraction, prove that the azimuth of the sun when rising is altered by it through a quantity $\frac{\sin \phi \cdot r}{\sqrt{\cos(\phi - \delta)\cos(\phi + \delta)}}$

11. If σ an σ' be the semi-vertical angles of the curves of the earth's shadow and penumbra, and θ the sun's apparent semi-diameter, prove that $2 \tan \theta = \tan \sigma + \tan \sigma' \sigma'$.

12. From the geocentric latitude and longitude of a planet, show how to deduce the heliocentric.

Natural Philosophy (Junior).

1. Find the common centre of gravity of three equal weights suspended from the vertices of a given triangle.

2. A rod 30 inches long rests in a horizontal position between two pegs, of which one is at the end, a weight of 5 pounds is suspended at the other end, find the position of the second peg in order that the pressure on it may be 15 lbs.

3. How would you determine the height to which a body would ascend when projected vertically upwards in vacuo?

4. A cube floating in water sinks to three-fourths of its depth, to what depth will it sink in mercury if the specific gravity of mercury be 13.

5. An object is held opposite a convex lens, at a distance equal to four times its focal length, determine the nature and position of its image.

6. Describe the several parts of the eye, and illustrate by a figure the refraction of a pencil of rays entering it.

7. How is it proved that sound is produced by the vibrations of ponderable matter?

8. What is meant by a unit of heat? if the specific heat of a substance be ·11 how many units of heat would be necessary to raise 20 lbs. of it through 150°.

9. How is it proved experimentally that solid bodies expand on an increase of temperature?

10. Why do metals at the ordinary temperature feel cold?

11. What is meant by a diamagnetic substance?

12. Give an outline of the process of electrotyping.

Appendix B.

Selection of Papers used at the Sessional Examinations.

NATURAL PHILOSOPHY (SENIOR).

1. How with a dipping needle alone could you determine the magnetic meridian, and true dip?

2. How would you determine the magnetic axis of a bar?

3. Describe accurately the several parts of the Induction Coil.

4. Explain the principle of the sine galvanometer.

5. How do you explain the current air which proceeds from a point attached to the conductor of an electrical machine when in action?

6. Describe some method of determining the number of vibrations of air which produce a certain musical tone.

7. Write down the numerical relations which subsist between the several notes of the gamut.

8. How would you deduce the change of volume of a gas caused by a simultaneous change in its pressure and temperature?

9. How does the latent heat of steam vary with its temperature?

10. What relation exists between the absorbing and reflecting powers of different bodies?

11. How is it experimentally proved that some crystallized bodies transmit heat differently in different directions?

12. Describe the Thermo-electric pile.

Prize Questions.

1. How does the pitch of an organ-pipe vary with the temperature? give the reason for your answer.

2. A plate and string vibrating in the same time produce tones of the same pitch but of different quality, how is this explained?

3. Describe the method of determining the dew-point of the wet bulb thermometer, and hence show how to get the coefficient of saturation of the air.

4. Describe Joule's method of determining the mechanical equivalent of Heat.

5. The specific Heat of a gas at a constant volume is different from its specific Heat at a constant pressure. Why so?

6. Describe some experiment to show the apparent radiation of cold, give an explanation of it.

7. Describe and explain the means by which water has been frozen in a red-hot vessel.

8. A copper helix, through which a Voltaic current is passing, is suspended so as to have free motion in a horizontal plane, describe accurately the position it will assume.

9. What is meant by the equivalent length of a circuit? How can we determine it when the lengths, sections, and conducting powers of its several parts are known.

10. A current of known intensity passes simultaneously through several conductors, how would you determine the intensity in each part.

NATURAL PHILOSOPHY.

1. If two forces be represented by two sides of a triangle, their resultant will be represented by twice the line drawn from their intersection to bisect the third side.

2. A weight of 20 lbs. is attached to a string, one extremity of which is fixed, what horizontal force must be applied to the weight in order that the string should make an angle of 30° with the vertical?

3. A uniform rod rests with its extremities on two props, at what point of it must a weight equal to its own weight be suspended in order that

the pressure on the props should be in the ratio of 2 : 1; the length of the rod being 60 inches?

4. A particle falls from rest, find the space described in the last three seconds of a fall through a height of 330 feet.

5. Prove that the centrifugal force on a body moving in a circle is given by the formula $f=\frac{v^2}{r}$.

6. A cylinder of iron, 12 inches in length, is placed in a vessel of mercury, with its axis vertical, to what depth will it sink, the specific gravity of iron being 7·2 that of mercury 13·6?

7. State and prove the rule for determining the pressure in a plane surface immersed in a fluid.

8. Is Venus a morning or an evening star shortly before being in inferior conjunction, what phase does she then present?

9. Explain and prove the rule for determining the latitude by the meridian transits of a circumpolar star, and show how to correct for refraction.

10. What must be the relation between the following elements in order that a lunar eclipse may be total, viz.:—The angular distance of the centre of the moon and centre of the earth's shadow, the moon's apparent semidiameter and horizontal parallax, the sun's apparent semidiameter and horizontal parallax?

11. Explain the construction of Newton's reflecting telescope and prove the rule for ascertaining its magnifying power.

12. Prove that the deviation produced by a prism with a small refracting angle is given by the following formula, viz.:—$\delta=(\mu-1)\epsilon$.

Prize Questions.

1. Assuming the rule for the composition of forces acting at a point, prove that for the composition of parallel forces.

2. Define a couple. Explain what is meant by its moment, and prove that two couples in the same plane will equilibrate if their moments be equal and opposite.

3. If a heavy body be made to describe a circle on the deck of a ship, the common centre of gravity will describe a circle.

4. Prove that the path of a projectile in vacuo is a parabola.

5. How long must a force of 100 ozs. act on a body weighing 100 lbs. to impress on it a velocity of 5 yards per second?

6. A seconds pendulum is carried to the top of a mountain, and there is found to lose one minute per day, what is the height of the mountain?

7. A U tube, closed at one end, is filled with air, mercury is poured into it until it stands at the height of 6 inches in each of the vertical arms, a column of water, 80 inches in length, is then poured into the open arm, to what height will the mercury rise in the closed side?

8. Show how the truth of Kepler's first two laws can be established in the case of the earth, from observing at intervals the sun's apparent diameter and longitude.

9. Given the right ascension and declination of a star, and the obliquity of the ecliptic, calculate its latitude and longitude.

10. Explain how the relative distances of a planet and the earth from the sun can be computed.

11. In a spherical reflector, prove that the focal length is a mean proportional between the distances of the radiant and its conjugate from the principle focus.

12. Derive a formula for the focal length of a lens formed by cementing together two lenses of different focal lengths.

JOHN ENGLAND.

Appendix B.

Selection of Papers used at the Sessional Examinations.

Chemistry.

Pass Questions.

N.B.—The name and faculty of each student are to be written on the first page of each book.

Answers to any fifteen questions will be regarded as sufficient for the pass examination.

1. Give examples of monad, dyad, triad, and tetrad metalloids and metals. Write their symbols with the indications of their atomicities.

2. Name the following compounds—

H_2S, N_2O, CH_4, KHO, CoH_2O_2, $KHCO_3$, $NaHSO_3$, $Ca2NO_3$.

3. Give examples in symbols illustrative of simple and of double decomposition.

4. Illustrate the processes of oxidation and of deoxidation by different modes of preparing sulphurous acid. Give its composition in weight and in volume, and its properties.

5. Give the formulae and the properties of the compounds produced by the action of nitric acid on copper.

6. Prepare phosphoric acid from bones. Write the formula of the hydrated tribasic acid, and mention the best test for its soluble salts.

7. Sulphuric acid is deoxidised by carbon, write out in symbols the reactions.

8. Illustrate combination by volume in the formation of water, sulphuretted hydrogen, ammonia, nitrous oxide, and hydrochloric acid.

9. Prepare carbonic oxide from ferrocyanide of potassium. Give the composition by weight and by volume, and the properties of this gas.

10. Write the formulae of the oxides, and of the hydrates of potassium, calcium, barium, and of the salts which they form with nitric and sulphuric acids.

11. What is meant by an anhydride? Give examples.

12. What is the present notion of an acid and of a salt? Give examples in symbols of normal salts formed by the union of a monad with a polybasic acid, and of a dyad with a monobasic acid.

13. Prepare carbonate of sodium from the chloride.

14. Describe shortly the metallurgy of zinc.

15. Salts of silver, copper, manganese, and lime are in the same solution, what would be the effect of adding, in the following order—

1st, HCl; 2nd, H_2S; 3rd, $(NH_4)_2S$; 4th, $(NH_4)_2CO_3$?

16. Write the formulae of the oxides of copper. State what effect is produced in a solution of sulphate of copper by caustic potash, and grape sugar by the aid of heat.

17. Give some examples of oxides which are isomorphous.

18. Nascent hydrogen acts on antimonial compounds, state what gas is formed; how would you distinguish it from the similar compound formed from arsenical preparations under the same circumstances.

19. Prepare the two oxides of mercury, and the corresponding chlorides.

20. To what crystalline system does the rhombic dodecahedron belong? What are the notations of the axes of this system?

21. Prepare oxygen by means of oxide of barium. Mark its atomicity. How is it changed into allotropic oxygen?

22. What is the water type? Illustrate it by the formation of anhydrous and of hydrated oxide of sodium on this type.

23. In the combustion of nitrogenized organic bodies with oxide of copper an error is apt to be caused, in estimating the quantity of carbon, by the production of a certain gas. State what gas it is, and how you would prevent its formation.

24. Ten grains of an organic substance give on combustion with oxide of copper 16·28 grains of carbonic anhydride, calculate the percentage of carbon.

C=12
O=16

25. State generally the method of ascertaining the atomic weight of an organic acid.

Chemistry.

Prize Questions.

N.B.—The name and faculty of each student are to be written on the first page of each book.

1. Point out the distinction between a molecule and an atom. Give the molecular and the atomic weights of hydrogen and of ammonia.

2. Give examples of the monatomic and polyatomic elements. Show by graphic notation what is meant by absolute, latent, and active atomicities. Illustrate in the same manner a saturated and a non-saturated compound.

3. Show that hydrosulphuric acid is the analogue of water. Point out by symbols the similarity of constitution of hydrosulphate of ammonium, of hydrate of potash.

4. What compounds of phosphorus are known in the anhydrous form? State how they are prepared both in the anhydrous and the hydrated form.

5. Prepare selenium. Contrast its compounds with those of another element which it closely resembles.

6. Contrast the old views of the constitution of acids and of salts with those which are now generally adopted. Write the formulae of some normal acid, and basic salts on both views.

7. Name the metals whose salts are not precipitated from an acid solution by sulphuretted hydrogen. Show by symbols why this gas when passed into neutral persulphate of iron does not cause any percipitation of the metal. Point out what really takes place.

8. Given the sulphate of barium, prepare from it the hydrated oxide. State in what manner oxygen gas may be obtained by means of this oxide.

9. With what oxide is alumina isomorphous? Illustrate isomorphism by the formulae of different alums.

10. In what state is bismuth generally found in nature? Give the formulae of its oxide, chloride, sulphide, and nitrate. What effect has water on the last two compounds, and how would you distinguish the products in this case from the similar one formed from chloride of antimony by water.

11. How is white percipitate prepared? What is its constitution according to the old and new views? How would you detect the presence of the different bodies which enter into its composition.

12. How is metallic platinum obtained from its ores? Mention some of its properties. Give the formulae of its oxides and chlorides, and of the double salts which the latter form with potassium and ammonium.

13. Derive $a : a : \infty c$ from $a : \infty a : c$, and $a : \infty a : \infty c$ from $a : a : c$. Name the figures.

14. What is the distinction between the combining quantity and the molecular weight of an organic compound? How is the former obtained? By what means would you arrive at a knowledge of the latter?

15. One hundred grains of the double salt of nicotine and of platinum

Appendix B. — Selection of Papers used at the Sessional Examinations.

contain 34·17 grains of metallic platinum, calculate the atomic weight of the alkaloid.

Pt=107·5
Cl= 35·5

J. Blyth, M.D., *Professor.*

Zoology and Botany.

1. Name the orders of the class Echinodermata.
2. Define, as nearly as possible, the class Crustacea.
3. What animals belong to the group of Molluscoida? How do these differ from Mollusca, in the stricter sense?
4. Compare selachians with true osseous fishes (Teleostei).
5. Give the dental formula of the horse.

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6. Not some of the more striking modifications of foliage seen among the British Umbelliferæ.
7. Describe the fruit of any umbelliferous plant.
8. Describe the flower of wheat or any other grass.
9. Compare the flowers of Ranunculus and Aconitum.
10. Give the characters of the order Scrophularineæ.

J. Reay Greene.

Geology and Mineralogy.

1. What are the agencies which alter the outline of the earth's crust?
2. In what kinds of rocks do fossils occur; and of what value are fossils in connexion with geology?
3. Give a section showing *Anticlinal* and *Synclinal axes;* also one showing *unconformability*, and define these terms.
4. What areas in Ireland afford Metamorphic Rocks; and what are the several kinds of Metamorphic Rocks in these areas?
5. What is the earliest genus of Trilobites; and what is the position and name of the rocks which contain this genus?
6. What is the mineral nature of the strata known as the Carboniferous slate of Ireland; and name some of the most characteristic fossils of these strata?
7. What deposits in the British Isles afford Rock Salt; and with what kinds of rock is this substance usually associated?
8. What is the British representation of the Neocomian group of the Continental Geologists?
9. Name the strata which form the middle Eocene group as this occurs in the Isle of Wight, and state some of the characteristic fossils thereof?
10. What is nature of the Flora, as regards climate, of the Miocene Formation?
11. To what family of minerals do Agates belong, and what are their characters and composition?
12. Where, and in what condition does Platina occur?
13. In what respect do Red Iron Ore (Hœmatite) and Brown Iron Ore (Limonite) differ from each other?

Robert Harkness.

Equity.

1. In what class of cases have Courts of Equity exclusive jurisdiction; and in what class of cases do they disclaim to have any?
2. Enumerate the "General Maxims" of Equity Jurisprudence?
3. Define the kind of "mistake" to rectify which a Court of Equity will grant relief?
4. What is a *donatio mortis causâ?* In what particulars does it differ from, and in what does it resemble a legacy?
5. How are trusts classified? What trusts must be evidenced by a writing declaratory of the trusts?
6. How do Courts of Equity regard things covenanted or agreed to be done? and what is essential in such cases to the creation of a constructive trust?
7. What is the effect of a stipulation that a mortgagee shall receive interest on the mortgage debt at £4 per cent., and that if the interest be not duly and regularly paid on the days appointed for the payment he shall be entitled to interest at the rate of £6 per cent?
8. What remedy has a mortgagee in Equity to enforce payment of the mortgage debt? and what is the relief to which a mortgager is entitled?
9. How are injunctions classified?
10. For what kind of debts will a writ of *Ne exeat regno* be issued?

Real Property and Principles of Conveyancing.

1. What is the nature of the interest which a lessee or a person who has taken a lease of lands or houses for a term of years has in the property comprised in the lease?
2. Explain "general occupancy" at common law. By what statute were the evils incident to general occupancy removed? What is meant by "a special occupant?"
3. Is there any, and if so, what difference in the barring of an estate tail and an estate "in quasi entail," in lands held for lives renewable for ever?
4. What word is indispensably necessary in a Conveyance to create an estate in fee-simple? to create an estate in tail special? and do those words confer any actual estate upon any other person than the Grantee, and if not, for what reason?
5. Distinguish between tenants holding in "severalty," "joint tenancy," and "tenancy in common," and what are the four "unities" of a joint tenancy?
6. Lands are conveyed to A and B (husband and wife), and to C, a third person, and their heirs—what proportion of the lands are they respectively entitled to hold?
7. If an estate be held *by entireties,* what parties are necessary to a conveyance of the inheritance, and what forms are necessary for the due completion of the Deed of Conveyance?
8. Why are estates in reversion and remainder said to *lie in grant?*
9. Give an outline of an ordinary Purchase Deed, observing the order and formalities observed in approved precedents.
10. Why was a Conveyance by way of "Lease and Release" said to be an *innocent* Conveyance? How did the lease or bargain and sale for a year operate to vest the legal possession of the land demised in the lessee for a year? What kind of Deed is now used to convey inheritances whether corporeal or incorporeal?
11. For what purpose is attestation of a Deed by a subscribing witness indispensable?

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Selection of Papers used at the Sessional Examinations.

12. How may executory estates in land be created? and in what respect do executory interests differ essentially from contingent remainders?

13. How are hereditaments purely incorporeal classified? To what class does a rent-charge belong?

14. Give an instance of a surrender in law of a lease, and of an assignment of a lease by operation of law?

15. In what manner may a power of appointment by will be properly exercised?

16. Give an instance of a Covenant implied by law?

17. What is the supposed origin of the rule that a good title to lands should be made for a period of sixty years back?

PERSONAL PROPERTY AND CONTRACTS.

1. How are the subjects of personal property chiefly distinguished from real property?

2. How are contracts classified?

3. What are the requisites for an effectual sale of goods of the value of £10 or upwards?

4. Under what circumstances has a vendor of goods a right to resume their possession after he had parted it under a contract of sale—what is such right called, and how may it be lost? What effect has the exercise of such right on the contract for sale?

5. How many persons may be joint owners of a ship, and into how many shares may the property in a ship be divided?

6. State the rules of law with respect to the appropriation of payments where more than one debt is due.

7. What is meant by *Consols*, and of what kind of property do they consist?

8. Define copyright, and state how long may the property in copyright endure.

9. What are bottomry and respondentia?

10. In the construction of contracts, what is the distinction taken between matter of express warranty and of representation merely?

11. What is requisite to entitle a party to recover money by virtue of a policy of insurance against loss by fire—and to what extent can the claim be sustained?

12. How are legacies classified? and how may a legacy be adeemed? Give an instance where a legacy does not lapse, although the legatee may die in the testator's lifetime.

13. What formalities are prescribed by statute to render a bill of sale of chattels valid against execution creditors of the assignor?

14. What is the distinction between an executor and an administrator? and give instances of limited administrations?

15. How is the distribution of an intestate's effects regulated?

16. What formalities are requisite to enable a married woman to dispose of her reversionary interest in personal property to which she may be entitled?

17. Within what period of time must actions for the recovery of debts, detinue, or replevin, be bought, and how far is the time affected by the nature of the debt, or the security for it?

PROFESSOR BARRY, *Examiner.*

Anatomy and Physiology.

1. Give an account of the nature and use of areolar tissue.
2. What are the microscopic features of adipose tissue?
3. Describe the microscopic features of voluntary muscular fibre.
4. Describe the fibro-cartilaginous tissue.
5. Describe the interior of the right auricle of the heart.
6. Describe the arytenoid cartilages and the vocal cords.
7. How are the spinal nerves connected with the cord, and how do they proceed from it in the cervical, dorsal, and lumbar regions?
8. Describe the changes in the state of the air and blood produced by the respiratory process.
9. Describe the impulse and sounds which accompany the action of the heart.
10. Describe the position and connexions of the pancreatic gland.
11. Describe the transverse arch of the colon and its visceral relations.
12. Describe the cortical part of the kidney and the Malpighian bodies.

Practical Anatomy.

1. Describe the shaft and articular extremities of the clavicle; also mention precisely the attachments of muscles and ligaments to this bone.
2. Describe the head, neck, shaft, and lower end of the fibula; state the connexions of ligaments and muscles with this bone.
3. State the origin, insertion, and relations of the pyriformis muscle.
4. Describe the origin, insertion, and relations of the gluteus medius muscle.
5. Describe the course and relations of the axillary artery; mention the branches of this vessel.
6. State the origin, course, and relations of the internal epigastric artery.
7. Describe the lumbar plexus of nerves, and mention its branches.
8. Describe the connexions of the thyroid body and the thyroid arteries.
9. State the connexions of the vesica urinaria in the male subject.
10. Mention the connexions of the submaxillary gland.

J. H. Corbett.

Prize and Sessional Examination, 1867–68.

1. What are the changes effected in the local blustema as the result of inflammation?
2. What are the changes in the textural elements themselves?
3. Describe Rokitansky's and Virchow's doctrines, as to the origin of pus.
4. Describe the process of ulceration and that of gangrene, and how do they differ?
5. Detail the different forms of erysipelas, its pathology, and the various methods of treatment adapted for each of its stages.
6. Relate the different kinds of hemorrhage, their causes, symptoms, and treatment.
7. How would you distinguish dislocation of the hip on the dorsum ilii from intracapsular fracture of the neck of the femur? and describe the symptoms of each, and the treatment.

Appendix B.

Selection of Papers used at the Sessional Examinations.

8. Describe the symptoms of strangulated inguinal hernia, the different methods of treatment, and the operation for the irreducible form.

9. Relate the different kinds of cataract, their pathology, and the operations suited for each, especially that of linear extraction, as adopted by Gräfe.

JAMES TANNER, Professor of Surgery.

MEDICAL JURISPRUDENCE (LEGAL PART.)

1. Upon what two grounds is "hearsay evidence" excluded by the law of England?

2. In what manner may questions be properly framed in the cross-examination of a witness, as distinguished from the direct; and what kind of questions are properly put on re-examination?

3. How far may experts or skilled witnesses corroborate their opinions by reference to works of authority on the subject of their examination?

4. What is the Medico-legal definition of a wound? Describe what is meant in law by a "maim," "a grievous bodily harm," and a "disabling," respectively.

5. To complete the crime of "murder," how soon after the injury must the death have taken place?

6. What, in your opinion, may be fairly reported to be an "Insurable life"? To render the life of a party insurable, to what extent should he appear to be free from disorders which tend to shorten life?

7. What are the forms necessary for the valid execution of a will? What may be regarded as about the best criterion of the existence of a testable capacity at the time of the execution of a will?

8. What is indispensably necessary to entitle a witness under examination to refresh his memory by reference to written memoranda?

PROFESSOR BARRY, *Examiner.*

MEDICAL JURISPRUDENCE.

1. An individual is discovered suspended by the neck. On inspection, the body is found to be free from injuries; opium is detected in the stomach; from what signs would you conclude that this was a case of suicide, and not of poisoning by opium and suspension of the body after death?

2. A body is found in a room with a bloody knife beside it. Between the fourth and fifth ribs on the right side is observed a penetrating wound, the direction of which is backwards, slightly upwards, and to the right; prussic acid is detected in the stomach; state all the circumstances which would lead you to conclude that the wound was not suicidal.

3. State shortly the characteristic features of amentia, dementia, and mania.

4. State the different modes of death in cases of drowning. Describe briefly the mode of treatment to be adopted.

5. Contrast the progress of the symptoms in transmitre tetanus, and in poisoning by strychnine. State the most frequent *post mortem* condition of the heart in the two cases.

6. Describe the symptoms, treatment, and *post mortem* appearance of poisoning by morphia. How would you detect it by Stas' method.

J. BLYTH.

Midwifery.

1. Describe the female urethra, its structure, direction, and relations to neighbouring parts. Describe also the mode of introducing the catheter.

2. What is the amnion; how is it formed, and what are its uses? Describe its relations to the chorion in early and in late pregnancy. How is it circumstanced with regard to the umbilical vessels?

3. Detail the phenomena of a normal menstruation, giving the characters of the menstrual fluid. What are the determining causes of its occurrence; and what is its value as a sign of pregnancy?

4. Give an outline of the structure and formation of the maternal portion of the placenta. How is the blood conveyed to and from it; and how is this blood circumstanced in relation to that of the fœtus?

5. Describe the most usual symptoms of an abortion. What are the local conditions which immediately give rise to the symptoms? Mention the principal points which would guide you in your treatment.

6. The fœtal head is entering the pelvis in the second position of Nægele. Detail the successive steps of its entrance, progress, and exit, until the child is born. Where would you expect to hear the pulsation of the fœtal heart in this case?

7. Give the symptoms, mechanism, and management of a footling presentation.

8. Enumerate the chief conditions in a difficult labour in which you would consider the use of the forceps indicated. What sort of instrument would you use when the head is still pretty high up in the cavity? Describe the steps of their application in this case.

9. The membranes have ruptured, and the umbilical cord has prolapsed in a labour otherwise natural; and it is still pulsating. Give an account of the several expedients you would have recourse to, so as to give the child the best chance of life.

10. In a case of placenta prævia, where the placenta is partially attached over the os uteri; with considerable hæmorrhage, good pains, and os but little dilated; what would be your immediate line of treatment, and what ulterior management may be required?

J. R. Harvey, A.B., M.D., *Professor.*

Medicine.

1. Relate some of the leading symptoms of hysteria. State the cause of the disease and the period of life of its commencement and termination.

2. What disease or diseases is it most likely to be confounded with, and the diagnostic marks in each case?

3. At what period of life do neuralgic affections most occur? State the cause of this preference.

4. What are the usual divisions of epilepsy and the grounds of such divisions?

5. What are the symptoms and cause of facial paralysis? What would induce you to give an unfavourable prognosis?

6. Why are apoplectic seizures to be expected in a case of cerebral softening? Why are second attacks of apoplexy likely to supervene on a first?

7. Describe the progress of a single pustule in a case of variola, from its commencement to its termination.

8. What are the chief points of distinction between typhus and typhoid fever?

9. State the causes which produce malaria and favour its spread.

Appendix B.

Selection Papers used at the Sessional Examinations.

10. Describe the progressive changes produced by inflammation in a serous membrane, and the effects on the principal organs lined by it, namely, brain, lungs, heart, and peritoneum.

11. What is the relation as to cause and effect between diseases of the stomach and liver?

DENIS C. O'CONNOR, *Professor.*

MATERIA MEDICA.

Pass Questions.

1. Opium; physiological action, therapeutical uses, preparations, their doses and modes of administration.
2. Tartar emetic; same particulars, with tests of impurities.
3. Aloes; active principle, action, uses, advantages and disadvantages, with modes of correcting latter.
4. Turpentine; action and uses.
5. Sulphate of magnesia; same particulars.
6. Iron; general action and therapeutical applications.

Prize Questions.

1. Petrowsky's conclusions as to the effects of iron.
2. Adulterations of iodide of potassium, and modes of detecting them.
3. What are the constituents of opium, and how do they differ in action?
4. Give the therapeutical division of cathartics, mode of action of each class, and therapeutical applications.
5. What are the modes of ascertaining the action of remedies? What the relative value of each?

N.B.—Pass questions to be answered first.

PURCELL O'LEARY, *Professor.*

Appendix C.

APPENDIX C.

List of the Students who obtained Honors or Prizes at the Sessional Examinations.

LIST of the STUDENTS who obtained HONORS or PRIZES at the SESSIONAL EXAMINATIONS held in June, 1868.

GREEK (Third Year).
- Joseph O'Brien, . . . 1st.
- Maurice Daly, . . . 2nd.

GREEK (Senior).
- Michael Finucane, . . . 1st.

GREEK (Junior).
- Robert Burgess, . . . 1st.
- Charles Harvey, . . . 2nd.
- Patrick Concannon, . . 3rd.
- Philip Benson, . . . 4th.

LATIN (Third Year).
- Joseph O'Brien, . . . 1st.
- Maurice Daly, . . . 2nd.

LATIN (Senior).
- Michael Finucane, . . 1st.
- James Magill, . . . 2nd.

LATIN (Junior).
- Philip Benson, . . . 1st.
- Timothy Nevil, . . } 2nd.
- Robert Burgess, . . }
- Charles Harvey, . . . 4th.

MATHEMATICS (Senior).
- Thomas Horan, . . . 1st.
- Benjamin Parkes, . . 2nd.
- James Moran, . . . 3rd.

HISTORY.
- Charles Crookshanks, . . 1st.

ENGLISH LANGUAGE.
- Daniel Wilson, . . . 1st.
- Walter Dunn, . . . 2nd.
- Patrick Concannon, . . 3rd.

ENGLISH LITERATURE.
- Joseph O'Brien, . . . 1st.
- Charles Crookshanks, . . 2nd.

MATHEMATICAL PHYSICS.
- Roderick W. Kane, . . 1st.

EXPERIMENTAL PHYSICS.
- Roderick W. Kane, . . 1st.

NATURAL PHILOSOPHY.
- Thomas Horan, . . . 1st.
- Benjamin Parkes, . . 2nd.

LIST of STUDENTS who obtained HONORS or PRIZES—*continued.*

Appendix C.

List of the Students who obtained Honors or Prizes at the Sessional Examinations.

NATURAL PHILOSOPHY (Medical).
- John Burke, . . . 1st.
- James Hurley, . . . 2nd.
- Francis Tuohy, . . . 3rd.

GEOLOGY AND MINERALOGY.
- John Taylor, . . .
- Francis Fair, . . .
- George Horan, . . .

FRENCH (Junior).
- Walter Dunne, . . . 1st.
- Charles Harvey, . . . 2nd.
- Edward Shipsey, . . . 3rd.

FRENCH (Medical).
- Joseph Wilson, . . . 1st.
- John Bourke, . . . 2nd.
- William Nealon, . . . 3rd.
- James Hurley, . . . 4th.

ENGINEERING (2nd year.)
- Benjamin Parkes, . . 1st.
- James Moran, . . } 2nd.
- Alfred Dann, . . }

CHEMISTRY.
- John Burke, . . . 1st.
- Francis Tuohy, . . . 2nd.
- Charles Haines, . . . 3rd.
- Augustin O'Connor, . . 4th.
- Benjamin Parkes, . . 5th.
- John Mahony, . . . 6th.

NATURAL HISTORY.
- Richard Henry, . . } 1st.
- Joseph Wilson, . . }

POLITICAL ECONOMY.
- Matthew J. Bourke, . . 1st.
- Charles Crookshanks, . . 2nd.

LOGIC.
- Michael Finucane, . . 1st.

METAPHYSICS.
- Thomas Rearden, . . 1st.
- Mathew J. Bourke, . } 2nd.
- Charles Crookshanks, . }

LAW, ENGLISH (2nd year).
- Cornelius Curtin, . . 1st.

LAW, ENGLISH (1st year).
- Stephen Ronan, . . . 1st.

LAW, CIVIL (2nd year).
- Cornelius Curtin, . . 1st.

LAW, CIVIL (1st year).
- William Taylor, . . } 1st.
- Stephen Ronan, . . }

MEDICINE.

ANATOMY AND PHYSIOLOGY (1st year).
- Francis Tuohy, . . . 1st.
- Augustin O'Connor, . . 2nd.
- John Burke, . . . 3rd.
- Richard Ryan, . . . 4th.
- George Vickery, . . . 5th.

ANATOMY AND PHYSIOLOGY (2nd year).
- John O'Neill, . . . 1st.
- James C. Holland, . . 2nd.

MATERIA MEDICA.
- John O'Neill, . . . 1st.

PRACTICAL CHEMISTRY.
- John O'Neill, . . . 1st.
- David W. O'Connor, . . 2nd.
- Jeremiah M'Craith, . } 3rd.
- Henry Pearde, . . }

SURGERY.
- Alexander S. Merrick, . . 1st.
- Matthew M. O'Connell, . 2nd.

MIDWIFERY.
- Alexander S. Merrick, . 1st.
- Matthew M. O'Connell, . 2nd.
- John F. Enright, . . 3rd.
- Philip Cogan, . . . 4th.

PRACTICAL ANATOMY.
- Matthew M. O'Connell, . 1st.
- Alexander S. Merrick, . 2nd.
- Michael Kearney, . . 3rd.
- Philip Cogan, . . . 4th.

MEDICAL JURISPRUDENCE.
- John Donovan, . . . 1st.
- William Newsam, . . . 2nd.
- James M. Beamish, . . 3rd.
- Thomas Lumsden, . . 4th.

PRACTICE OF MEDICINE.
- William F. Newsam, . } 1st.
- John Donovan, . }
- James M. Beamish, . } 3rd.
- Timothy Crowly, . }
- Thomas Lumsden, . }

APPENDIX D.

Appendix D.

Examination Papers for Scholarships.

SELECTION OF PAPERS OF QUESTIONS USED AT THE SCHOLARSHIP EXAMINATIONS.

GREEK.—SENIOR SCHOLARSHIP IN ANCIENT CLASSICS.

(A.)—Translate :—

ÆSCHYLUS—*Persæ*, vv. 799–833.

ΧΟΡΟΣ. *πῶς εἶπας; οὐ γὰρ πᾶν στράτευμα βαρβάρων*
περᾷ τὸν Ἑλλης πορθμὸν Εὐρώπης ἄπο;
ΔΑΡΕΙΟΣ. *παῦροί γε πολλῶν, εἴ τι πιστεῦσαι θεῶν*

Appendix D.

Examination Papers for Scholarships.

χρὴ θεσφάτοισιν, ἐς τὰ νῦν πεπραγμένα
βλέψαντα· συμβαίνει γὰρ οὐ τὰ μὲν, τὰ δ' οὔ.
κεἶπερ τάδ' ἐστὶ, πλῆθος ἔκκριτον στρατοῦ
λείπει κεναῖσιν ἐλπίσιν πεπεισμένος.
μίμνουσι δ' ἔνθα πεδίον Ἀσωπὸς ῥοαῖς
ἄρδει, φίλον πίασμα βοιωτῶν χθονὶ·
οὔ σφιν κακῶν ὕψιστ' ἐπαμμένει παθεῖν,
ὕβρεως ἄποινα κἀθέων φρονημάτων·
οἳ γῆν μολόντες Ἑλλάδ' οὐ θεῶν βρέτη
ᾐδοῦντο συλᾶν οὐδὲ πιμπράναι νεώς.
βωμοὶ δ' ἄϊστοι, δαιμόνων θ' ἱδρύματα
πρόῤῥιζα φύρδην ἐξανέστραπται βάθρων.
τοιγὰρ κακῶς δράσαντες οὐκ ἐλάσσονα
πάσχουσι, τὰ δὲ μέλλουσι, κοὐδέπω κακῶν
κρηπὶς ὕπεστιν, ἀλλ' ἔτ' ἐκπιδύεται.
τόσος γὰρ ἔσται πέλανος αἱματοσταγὴς
πρὸς γῇ Πλαταιῶν Δωρίδος λόγχης ὕπο·
θῖνες νεκρῶν δὲ καὶ τριτοσπόρῳ γονῇ
ἄφωνα σημανοῦσιν ὄμμασιν βροτῶν
ὡς οὐχ ὑπέρφευ θνητὸν ὄντα χρὴ φρονεῖν·
ὕβρις γὰρ ἐξανθοῦσ' ἐκάρπωσε στάχυν
ἄτης, ὅθεν πάγκλαυτον ἐξαμᾷ θέρος.
τοιαῦθ' ὁρῶντες τῶνδε τἀπιτίμια,
μέμνησθ' Ἀθηνῶν Ἑλλάδος τε, μηδέ τις
ὑπερφρονήσας τὸν παρόντα δαίμονα
ἄλλων ἐρασθεὶς ὄλβον ἐκχέῃ μέγαν.
Ζεύς τοι κολαστὴς τῶν ὑπερκόπων ἄγαν
φρονημάτων ἔπεστιν, εὔθυνος βαρύς.
πρὸς ταῦτ' ἐκεῖνον σωφρονεῖν κεχρημένον
πινύσκετ' εὐλόγοισι νουθετήμασι,
λῆξαι θεοβλαβοῦνθ' ὑπερκόπῳ θράσει.

1. Πλῆθος ἔκκριτον στρατοῦ κ.τ.λ. Explain this statement.
2. What is the exact meaning of κρηπίς? Translate the line in which it occurs, with the various readings ἐκπιδύεται and ἐκπληθύεται.
3. Explain the construction σωφρονεῖν κεχρημένοι.
4. Explain the expression πέλανος αἱματοσφαγής by a periphrasis.
5. In what respect is the *Persæ* the most imperfect of the extant tragedies of Æschylus?

(B.)—Translate:—

THUCYDIDES, book iii., c. 89.

Τοῦ δ' ἐπιγιγνομένου θέρους Πελοποννήσιοι καὶ οἱ ξύμμαχοι μέχρι μὲν τοῦ ἰσθμοῦ ἦλθον ὡς ἐς τὴν Ἀττικὴν ἐσβαλοῦντες Ἄγιδος τοῦ Ἀρχιδάμου ἡγουμένου Λακεδαιμονίων βασιλέως, σεισμῶν δὲ γενομένων πολλῶν ἀπετράποντο πάλιν καὶ οὐκ ἐγένετο ἐσβολή, καὶ περὶ τούτους τοὺς χρόνους, πῶν σεισμῶν κατεχόντων, τῆς Εὐβοίας ἐν Ὠροβίαις ἡ θάλασσα ἐπανελθοῦσα ἀπὸ τῆς τότε οὔσης γῆς καὶ κυματωθεῖσα ἐπῆλθε τῆς πόλεως μέρος τι, καὶ τὸ μὲν κατέκλυσε, τὸ δ' ὑπενόστησε, καὶ θάλασσα νῦν ἐστι πρότερον οὖσα γῆ· καὶ ἀνθρώπους διέφθειρεν ὅσοι μὴ ἐδύναντο φθῆναι πρὸς τὰ μετέωρα ἀναδραμόντες. καὶ περὶ Ἀταλάντην τὴν ἐπὶ Λοκροῖς τοῖς Ὀπουντίοις νῆσον παραπλησία γίγνεται ἐπίκλυσις, καὶ τοῦ τε φρουρίου τῶν Ἀθηναίων παρεῖλε καὶ δύο νεῶν ἀνειλκυσμένων τὴν ἑτέραν κατέαξεν. ἐγένετο δὲ καὶ ἐν Πεπαρήθῳ κύματος ἐπαναχώρησίς τις, οὐ μέντοι ἐπέκλυσέ γε· καὶ σεισμὸς τοῦ τείχους τι κατέβαλε καὶ τὸ πρυτανεῖον καὶ ἄλλας οἰκίας ὀλίγας. αἴτιον δ' ἔγωγε νομίζω τοῦ τοιούτου, ᾧ ἰσχυρότατος ὁ σεισμὸς

ἐγένετο, κατὰ τοῦτο ἀποστέλλειν τε τὴν θάλασσαν καὶ ἐξαπίνης πάλιν ἐπισπωμένην βιαιότερον τὴν ἐπίκλυσιν ποιεῖν· ἄνευ δὲ σεισμοῦ οὐκ ἄν μοι δοκεῖ τὸ τοιοῦτο ξυμβῆναι γενέσθαι.

1. What part of the verb is ἐσβαλοῦντες, and what is the exact force of the preceding ὡς?

2. What is the construction of τῶν σεισμῶν κατεχόντων?

3. Supply the ellipses in τὸ μὲν κατέκλυσε, τὸ δ' ὑπενόστησε.

4. Καὶ θάλασσα νῦν ἐστὶ πρότερον οὖσα γῆ. How would the meaning be affected by substituting ἐστὶν ἡ for ἐστί?

5. Τοῦ τε φρουρίου. Why is φρουρίου in the genitive?

6. Describe accurately the position of the places mentioned in this chapter.

Senior Scholarships.

Translate into Attic Greek:—

It often seems to us a great contradiction in Greek mythology that the chief of the gods should be represented as himself subject to fate. We do not enough consider what a real and deep comfort the polytheist found in this thought. A ruler of the elements might have in himself all the vicissitudes which nature exhibits. If he were like a human sovereign he might have all the caprices of a human sovereign. This faith in necessity told the Greek that the universe was not after all dependent on those natural vicissitudes or human caprices, that a law fixed and unchangeable was beneath them all. At times it seemed to him as if Jove, the king of earth, was chaining down all the aspirations of man, was fastening to a rock, and, tormenting with a vulture, the champions who sought to do him good—to make him freer and wiser. What a relief to think that destiny had determined the period of his captivity and of the tyranny which had imposed it! And yet there were times when the sense of a hard, dry iron rule—an irresistible destiny—became more intolerable than the government of the most uncertain king.

Into Iambic verse:—

Lear. Pray do not mock me:
I am a very foolish fond old man,
Fourscore and upward; and, to deal plainly,
I fear, I am not in my perfect mind.
Methinks, I should know you, and know this man;
Yet, I am doubtful: for I am mainly ignorant
What place this is; and all the skill I have
Remembers not these garments; nor I know not
Where I did lodge last night. Do not laugh at me;
For, as I am a man, I think this lady
To be my child, Cordelia.
Cordelia. And so I am; I am.
Lear. Be your tears wet? Yes, faith, I pray weep not.
If you have poison for me, I will drink it:
I know you do not love me; for your sisters
Have, as I do remember, done me wrong.
You have some cause, they have not.

Shakespeare.

Appendix D.

Examination Papers for Scholarships.

GREEK.—SECOND YEAR SCHOLARSHIPS.

Translate :—

(A.)—HOMER—*Odyssey*, book xvii., vv. 217–232.

Νῦν μὲν δὴ μάλα πάγχυ κακὸς κακὸν ἠγηλάζει,
ὡς αἰεὶ τὸν ὁμοῖον ἄγει θεὸς ὡς τὸν ὁμοῖον.
πῇ δὴ τόνδε μολοβρὸν ἄγεις, ἀμέγαρτε συβῶτα;
πτωχὸν ἀνιηρὸν, δαιτῶν ἀπολυμαντῆρα;
ὃς πολλῇς φλιῇσι παραστὰς θλίψεται ὤμους,
αἰτίζων ἀκόλους, οὐκ ἄορας οὐδὲ λέβητας·
τόν κ' εἴ μοι δοίης σταθμῶν ῥυτῆρα λιπέσθαι
σηκοκόρον τ' ἔμεναι θαλλόν τ' ἐρίφοισι φορῆναι,
καί κεν ὀρὸν πίνων μεγάλην ἐπιγουνίδα θεῖτο.
ἀλλ' ἐπεὶ οὖν δὴ ἔργα κάκ' ἔμμαθεν, οὐκ ἐθελήσει
ἔργον ἐποίχεσθαι, ἀλλὰ πτώσσων κατὰ δῆμον
βούλεται αἰτίζων βόσκειν ἣν γαστέρ' ἄναλτον·
ἀλλ' ἔκ τοι ἐρέω, τὸ δὲ καὶ τετελεσμένον ἔσται·
αἴ κ' ἔλθῃ πρὸς δώματ' Ὀδυσσῆος θείοιο,
πολλά οἱ ἀμφὶ κάρῃ σφέλα ἀνδρῶν ἐκ παλαμάων
πλευραὶ ἀποτρίψουσι δόμον κάτα βαλλομένοιο.

1. *a.* Derive ἠγηλάζειν, μολοβρός, ἄκολος, σηκοκόρος, ἀμέγαρτος, ἄναλτος. *b.* Decline ἄορας, κάρη, and σφέλα. *c.* Distinguish between ὅρος and ὀρός. *d.* What is the apparent distinction between ἐθέλειν and βούλεσθαι, as derived from this passage?

(B.)—ÆSCHYLUS—*Prometheus Vinctus*, vv. 560–584.

Τίς γῆ; τί γένος; τίνα φῶ λεύσσειν
τόνδε χαλινοῖς ἐν πετρίνοισιν
χειμαζόμενον;
τίνος ἀμπλακίας ποιναῖς ὀλέκει;
σήμηνον ὅποι
γῆς ἡ μογερὰ πεπλάνημαι.
ἀ ἀ,
χρίει τις αὖ με τὰν τάλαιναν οἶστρος,
εἴδωλον Ἄργου γηγενοῦς, ἄλευ δᾶ,
τὸν μυριωπὸν εἰσορῶσα βούταν.
ὁ δὲ πορεύεται δόλιον ὄμμ' ἔχων,
ὃν οὐδὲ κατθανόντα γαῖα κεύθει.
ἀλλ' ἐμὲ τὰν τάλαιναν
ἐξ ἐνέρων πέρῶν κυναγετεῖ,
πλανᾷ τε νῆστιν ἀνὰ τὰν παραλίαν ψάμμον.
ὑπὸ δὲ κηρόπλαστος ὀτοβεῖ δόναξ
ἀχέτας ὑπνοδόταν νόμον· ἰὼ ἰώ, πόποι,
ποῖ, πόποι, ποῖ μ' ἄγουσι τηλέπλανοι πλάναι;
τί ποτέ μ', ὦ Κρόνιε·
παῖ, τί ποτε παῖσδ' ἐνέζευξας εὑρὼν ἁμαρτοῦσαν ἐν πημοσύναις, ἐᾷ,
οἰστρηλάτῳ δὲ δείματι δειλαίαν
παράκοπον ὧδε τείρεις;
πυρί με φλέξον, ἢ χθονὶ κάλυψον, ἢ ποντίοις δάκεσι δὸς βορὰν,
μηδέ μοι φθονήσῃς
εὐγμάτων, ἄναξ.

1. *a.* Explain the construction of ὑπὸ, v. 574. *b.* Distinguish between *νόμος* and *νομός*. *c.* Derive *δάκος*, and explain the construction of *εὐγμάτων*, v. 584.

Translate into Iambic verse :—

1. By the waters of Babylon we sat down and wept, when we remembered thee, O Sion.
2. As for our harps, we hanged them up, upon the trees that are therein.
3. For they that led us away captive required of us a song, and melody, in our heaviness: Sing us one of the songs of Sion.

Translate :—

(A.)—HERODOTUS, book vii., c. 218.

Ἐμαθον δέ σφεας οἱ Φωκέες ὧδε ἀναβεβηκότας· ἀναβαίνοντες γὰρ ἐλάνθανον οἱ Πέρσαι τὸ οὖρος πᾶν ἐὸν δρυῶν ἐπίπλεον. ἦν μὲν δὴ νηνεμίη, ψόφου δὲ γινομένου πολλοῦ, ὡς οἰκὸς ἦν φύλλων ὑποκεχυμένων ὑπὸ τοῖσι ποσί, ἀνά τε ἔδραμον οἱ Φωκέες καὶ ἐνέδυνον τὰ ὅπλα, καὶ αὐτίκα οἱ βάρβαροι παρῆσαν. ὡς δὲ εἶδον ἄνδρας ἐνδυομένους ὅπλα, ἐν θώυματι ἐγένοντο· ἐλπόμενοι γὰρ οὐδέν σφι φανήσεσθαι ἀντίξοον, ἐνεκύρησαν στρατῷ. ἐνθαῦτα Ὑδάρνης καταρρωδήσας. μὴ οἱ Φωκέες ἔωσι Λακεδαιμόνιοι, εἴρετο τὸν Ἐπιάλτην, ὁποδαπὸς εἴη ὁ στρατὸς, πυθόμενος δὲ ἀτρεκέως διέτασσε τοὺς Πέρσας ὡς ἐς μάχην. οἱ δὲ Φωκέες ὡς ἐβάλλοντο τοῖσι τοξεύμασι πολλοῖσί τε καὶ πυκνοῖσι, οἴχοντο φεύγοντες ἐπὶ τοῦ οὔρεος τὸν κόρυμβον, ἐπιστάμενοι, ὡς ἐπὶ σφέας ὡρμήθησαν ἀρχήν, καὶ παρεσκευάδατο ὡς ἀπολεόμενοι. Οὗτοι μὲν δὴ ταῦτα ἐφρόνεον, οἱ δὲ ἀμφὶ Ἐπιάλτην καὶ Ὑδάρνεα Πέρσαι Φωκέων μὲν οὐδένα λόγον ἐποιεῦντο, οἱ δὲ κατέβαινον τὸ οὖρος κατὰ τάχος.

1. To what event does the above extract refer? Describe the locality in which it occurred.
2. Give the Attic forms of *οἰκός* and *παρεσκευάδατο*.
3. What are the various meanings of *κόρυμβος*? Derive *νηνεμίη* and *ἀντίξοος*.
4. Distinguish between *ψόφος*, *φωνή*, and *δοῦπος*.

(B.)—PLATO—*Apologia Socratis.*

Εἶεν δή, ὦ ἄνδρες· ἃ μὲν ἐγὼ ἔχοιμ' ἂν ἀπολογεῖσθαι, σχεδόν ἐστι ταῦτα καὶ ἄλλα ἴσως τοιαῦτα. τάχα δ' ἄν τις ὑμῶν ἀγανακτήσειεν ἀναμνησθεὶς ἑαυτοῦ, εἰ ὁ μὲν καὶ ἐλάττω τουτουΐ τοῦ ἀγῶνος ἀγῶνα ἀγωνιζόμενος ἐδεήθη τε καὶ ἱκέτευσε τοὺς δικαστὰς μετὰ πολλῶν δακρύων, παιδία τε αὑτοῦ ἀναβιβασάμενος, ἵνα ὅ τι μάλιστα ἐλεηθείη, καὶ ἄλλους τῶν οἰκείων καὶ φίλων πολλούς, ἐγὼ δὲ οὐδὲν ἄρα τούτων ποιήσω, καὶ ταῦτα κινδυνεύων, ὡς ἂν δόξαιμι, τὸν ἔσχατον κίνδυνον. τάχ' οὖν τις ταῦτα ἐννοήσας αὐθαδέστερον ἂν πρός με σχοίη, καὶ ὀργισθεὶς αὐτοῖς τούτοις θεῖτο ἂν μετ' ὀργῆς τὴν ψῆφον. εἰ δή τις ὑμῶν οὕτως ἔχει,—οὐκ ἀξιῶ μὲν γὰρ ἔγωγε· εἰ δ' οὖν, ἐπιεικῆ ἄν μοι δοκῶ πρὸς τοῦτον λέγειν λέγων ὅτι ἐμοί, ὦ ἄριστε, εἰσὶ μέν πού τινες καὶ οἰκεῖοι· καὶ γὰρ τοῦτο αὐτὸ τὸ τοῦ Ὁμήρου, οὐδ' ἐγὼ ἀπὸ δρυὸς οὐδ' ἀπὸ πέτρης πέφυκα, ἀλλ' ἐξ ἀνθρώπων, ὥστε καὶ οἰκεῖοί μοί εἰσι καὶ υἱεῖς, ὦ ἄνδρες Ἀθηναῖοι, τρεῖς, εἷς μὲν μειράκιον ἤδη, δύο δὲ παιδία· ἀλλ' ὅμως οὐδένα αὐτῶν δεῦρο ἀναβιβασάμενος δεήσομαι ὑμῶν ἀποψηφίσασθαι.

Describe the constitution of the court before which Socrates was tried, and the forms of its proceeding.

Appendix D.

Examination Papers for Scholarships.

(C.)—Translate into Attic Greek :—

Amongst too many other instances of the great corruption and degeneracy of the age wherein we live, the great and general want of sincerity in conversation is none of the least. The world is grown so full of dissimulation and compliment that men's words are hardly any signification of their thoughts; and if any man measure his words by his heart, and speak as he thinks, and do not express more kindness to every man than men usually have for any man, he can hardly escape the censure of want of breeding.

GREEK.—FIRST YEAR SCHOLARSHIPS.

Translate :—

(A.)—XENOPHON—*Anabasis*, book iii., c. 4, § 44.

Ἐντεῦθεν ἐπορεύοντο ὡς ἐδύναντο τάχιστα. οἱ δ' ἐπὶ τοῦ λόφου πολέμιοι ὡς ἐνόησαν αὐτῶν τὴν πορείαν ἐπὶ τὸ ἄκρον, εὐθὺς καὶ αὐτοὶ ὥρμησαν ἀμιλλᾶσθαι ἐπὶ τὸ ἄκρον. καὶ ἐνταῦθα πολλὴ μὲν κραυγὴ ἦν τοῦ Ἑλληνικοῦ στρατεύματος διακελευομένων τοῖς ἑαυτῶν, πολλὴ δὲ κραυγὴ τῶν ἀμφὶ Τισσαφέρνην τοῖς ἑαυτῶν διακελευομένων. Ξενοφῶν δὲ παρελαύνων ἐπὶ τοῦ ἵππου παρεκελεύετο, Ἄνδρες, νῦν ἐπὶ τὴν Ἑλλάδα νομίζετε ἀμιλλᾶσθαι, νῦν πρὸς τοὺς παῖδας καὶ τὰς γυναῖκας, νῦν ὀλίγον πονήσαντες ἁμαχεὶ τὴν λοιπὴν πορευσόμεθα.

1. *a.* Explain the construction *ὡς ἠδύναντο τάχιστα*, and give the Latin equivalent expression. *b.* Explain the construction of *διακελευομένων*, in the first sentence in which it occurs, and express the force of the preposition *διά*, in the compound word. *c.* Write in full the declension of *ἀνήρ* and *γυνή*.

(B.)—HERODOTUS, book ii., c. 151.

Τῶν δὲ δυώδεκα βασιλέων δικαιοσύνῃ χρεομένων, ἀνὰ χρόνον ὡς ἔθυσαν ἐν τῷ ἱρῷ τοῦ Ἡφαίστου, τῇ ὑστάτῃ τῆς ὀρτῆς μελλόντων κατασπείσειν ὁ ἀρχιρεὺς ἐξήνεικέ σφι φιάλας χρυσέας, τῇσί περ ἐώθεσαν σπένδειν, ἁμαρτὼν τοῦ ἀριθμοῦ ἕνδεκα δυώδεκα ἐοῦσι. ἐνθαῦτα ὡς οὐκ εἶχε φιάλην ὁ ἔσχατος ἐστεὼς αὐτῶν Ψαμμίτιχος, περιελόμενος τὴν κυνέην ἐοῦσαν χαλκέην ὑπέσχε τε καὶ ἔσπενδε. κυνέας δὲ καὶ οἱ ἄλλοι ἅπαντες ἐφόρεόν τε βασιλέες καὶ ἐτύγχανον τότε ἔχοντες. Ψαμμίτιχος μέν νυν οὐδενὶ δολερῷ νόῳ χρεόμενος ὑπέσχε τὴν κυνέην, οἱ δὲ ἐν φρενὶ λαβόντες τό τε ποιηθὲν ἐκ Ψαμμιτίχου καὶ τὸ χρηστήριον, ὅ τι ἐκέχρηστό σφι, τὸν χαλκέῃ σπείσαντα αὐτῶν φιάλῃ τοῦτον βασιλέα ἔσεσθαι μοῦνον Αἰγύπτου, ἀναμνησθέντες τοῦ χρησμοῦ κτεῖναι μὲν οὐκ ἐδικαίωσαν Ψαμμίτιχον, ὡς ἀνεύρισκον βασανίζοντες ἐξ οὐδεμιῆς προνοίης αὐτὸν ποιήσαντα, ἐς δὲ τὰ ἕλκεα ἔδοξέ σφι διῶξαι ψιλώσαντας τὰ πλεῖστα τῆς δύναμιος, ἐκ δὲ τῶν ἑλέων ὁρμεόμενον μὴ ἐπιμίσγεσθαι τῇ ἄλλῃ Αἰγύπτῳ.

(C.)—Translate the following sentences into Greek, adding the accents :—

1. The rest of the Greeks laid waste the land of the Persians.
2. I should be glad to see the troops marching in order.
3. If I had had some bread I would have given it to the poor man.
4. We ought to cultivate virtue and avoid everything that is base.

(D.)—Describe the following localities, and mention the historical events which have rendered them famous :—Artemisium, Tanagra, Sphacteria.

Translate:

(A.)—HOMER—*Iliad*, book v., vv. 9–30.

Ἦν δέ τις ἐν Τρώεσσι Δάρης, ἀφνειὸς, ἀμύμων,
ἱρεὺς Ἡφαίστοιο· δύω δὲ οἱ υἱέες ἦστην,
Φηγεὺς Ἰδαῖός τε, μάχης εὖ εἰδότε πάσης.
τὼ οἳ, ἀποκρινθέντε ἐναντίω ὁρμηθήτην·
τὼ μὲν ἀφ' ἵππων οἵων, ὁ δ' ἀπὸ χθονὸς ὦρνυτο πεζός.
οἱ δ' ὅτε δὴ σχεδὸν ἦσαν ἐπ' ἀλλήλοισιν ἰόντες,
Φηγεὺς ῥα πρότερος προΐει δολιχόσκιον ἔγχος·
Τυδείδεω δ' ὑπὲρ ὦμον ἀριστερὸν ἦλυθ' ἀκωκὴ
ἔγχεος, οὐδ' ἔβαλ' αὐτόν· ὁ δ' ὕστερος ὦρνυτο χαλκῷ
Τυδείδης· τοῦ δ' οὐχ ἅλιον βέλος ἔκφυγε χειρὸς
ἀλλ' ἔβαλε στῆθος μεταμάζιον, ὦσε δ' ἀφ' ἵππων.
Ἰδαῖος δ' ἀπόρουσε λιπὼν περικαλλέα δίφρον,
οὐδ' ἔτλη περιβῆναι ἀδελφειοῦ κταμένοιο·
οὐδέ κεν αὐτὸς ὑπέκφυγε Κῆρα μέλαιναν,
ἀλλ' Ἥφαιστος ἔρυτο, σάωσε δὲ νυκτὶ καλύψας,
ὡς δῇ οἱ μὴ πάγχυ γέρων ἀκαχήμενος εἴη.
ἵππους δ' ἐξελάσας μεγαθύμου Τυδέος υἱὸς
δῶκεν ἑταίροισιν καταάγειν κοίλας ἐπὶ νῆας.
Τρῶες δὲ μεγάθυμοι ἐπεὶ ἴδον υἷε Δάρητος
τὸν μὲν ἀλευάμενον, τὸν δὲ κτάμενον παρ' ὄχεσφιν,
πᾶσιν ὀρίνθη θυμός· ἀτὰρ γλαυκῶπις Ἀθήνη
χειρὸς ἑλοῦσ' ἐπέεσσι προσηύδα θοῦρον Ἄρηα.

1. Parse *fully* the following words, giving their Attic forms:—υἱέες, ἦστην, τώ, Τυδείδεω, ἔκφυγε, ἔρυτο, ἐπέεσσι, ὄχεσφι.
2. Derive or decompose ἀφνειός, ἀμύμων, δολιχόσκιος, μεταμάζιος, γλαυκῶπις.
3. State the laws of Homeric hexameter verse, defining the term *cæsura*, and pointing out the position of the principal cæsuras in the first four lines of the extract.

(B.)—EURIPIDES—*Medea*, vv. 1251–1276.

ΧΟΡΟΣ. ἰὼ Γᾶ τε καὶ παμφαὴς στρ.
ἀκτὶς Ἀελίου, κατίδετ' ἴδετε τὰν
ὀλομέναν γυναῖκα, πρὶν φοινίαν
τέκνοις προσβαλεῖν χέρ' αὐτοκτόνον·
σᾶς γὰρ ἀπὸ χρυσέας γονᾶς
ἔβλαστεν, θεῶν δ' αἵματι πίτνειν
φόβος ὑπ' ἀνέρων.
ἀλλά νιν, ὦ φάος διογενές, κάπειργε κατάπαυσον, ἔξελ' οἴκων φονίαν
πάλαιναν τ' Ἐρινὺν ὑπ' ἀλαστόρων.
μάταν μόχθος ἔρρει τέκνων, ἀντ.
μάταν ἄρα γένος φίλιον ἔτεκες, ὦ
κυανέαν λιποῦσα Συμπληγάδων
πεπρᾶν ἀξενωπάταν εἰσβολάν.
δείλαια, τί σοι φρενῶν βαρὺς
χόλος προσπίτνει καὶ δυσμενὴς
φόνος ἀμείβεται;
χαλεπὰ γὰρ βροτοῖς ὁμογενῆ μιάσματ' ἐπὶ γαῖαν αὐτοφόνταις ξυνῳδὰ θεόθεν πίπτουτ' ἐπὶ δόμοις ἄχη.

Appendix D.

Examination Papers for Scholarships.

ΠΑΙΔΕΣ. οἴμοι, τί δράσω; ποῖ φύγω μητρὸς χέρας;
ΧΟΡΟΣ. ἀκούεις βοὰν ἀκούεις τέκνων;
ἰὼ τλᾶμον, ὦ κακοτυχὲς γύναι.
παρέλθω δόμους; ἀρῆξαι φόνον
δοκεῖ μοι τέκνοις.

1. Point out the Doric forms in extract (B), giving their Attic equivalents, and explaining their introduction into the choral portions of the Attic drama.
2. Describe accurately the position of the Symplegades.
3. Give the *ordo verborum*, and explain the construction of the sentence χαλεπὰ γὰρ βροτοῖς . . . δόμοις ἄχη.

JOHN RYALL, *Professor.*

LATIN.—SENIOR SCHOLARSHIP.

Subject for a Latin Essay.

"Tota philosophia frugifera et fructuosa est."

Translate into Latin verse, in an appropriate metre :—

Now, upon Syria's land of roses
Softly the light of eve reposes,
And, like a glory, the broad sun
Hangs over sainted Lebanon ;
Whose head in wintry grandeur towers,
And whitens with eternal sleet,
While summer, in a vale of flowers,
Is sleeping rosy at his foot.
To one who look'd from upper air
O'er all the enchanted regions there,
How beauteous must have been the glow,
The life, the sparkling from below !

LATIN.—SCHOLARSHIPS OF THE SECOND AND THIRD YEARS.

Translate in as few words as possible :

TACITUS—*Histories*, i. 10.

Oriens adhuc inmotus. Suriam et quattuor legiones obtinebat Licinius Mucianus, vir secundis adversisque iuxta famosus. Insignes amicitias iuvenis ambitiose coluerat ; mox attritis opibus, lubrico statu, suspecta etiam Claudii iracundia, in secretum Asiae repositus tam prope ab exule fuit quam postea a principe. Luxuria industria, comitate adrogantia, malis bonisque artibus mixtus. Nimiae voluptates, cum vacaret : quotiens expedierat, magnae virtutes. Palam laudares : secreta male audiebant. Sed apud subiectos, apud proximos, apud collegas variis inlecebris potens, et cui expeditius fuerit tradere imperium quam obtinere.

Translate into Latin verse :—

Oh, thou Parnassus! whom I now survey,
Not in the phrensy of a dreamer's eye,
Not in the fabled landscape of a lay,
But soaring snow-clad through thy native sky,
In the wild pomp of mountain majesty!
What marvel if I thus essay to sing?
The humblest of thy pilgrims passing by
Would gladly woo thine echoes with his string,
Though from thy heights no more one Muse will wave her wing.

Translate into Latin prose:—

Besides these several advantages which rise from Hope, there is another which is none of the least, and that is, its great efficacy in preserving us from setting too high a value on present enjoyments. The saying of Cæsar is very well known. When he had given away all his estates in gratuities amongst his friends, one of them asked what he had left for himself, to which that great man replied, Hope. His natural magnanimity hindered him from prizing what he was certainly possessed of, and turned all his thoughts upon something more valuable that he had in view.

I question not but every reader will draw a moral from this story, and apply it to himself without my direction.

LATIN.—FIRST YEAR'S SCHOLARSHIPS.

1. Explain fully the words *comitia, curiata, tributa,* and *centuriata.*
2. How are time and place expressed in Latin?
3. Give the principal parts of *cupio, pario, gigno, curro,* and *verro.*
4. Describe the situation of Agrigentum, Panormus, Lugdunum, Nemausus, Numantia, and Verona.
5. State the rules for the second foot of the hexameter verse, with examples.

Retranslate into Latin :—

It moved me to hear of the tears which you shed after you left me: had you done it in my presence, I should have dropt perhaps all thoughts of my journey. That part however pleases me, where you comfort yourself with the hopes of our meeting again shortly: which expectation indeed is what chiefly supports me: I will write to you perpetually; give you an account of everything which relates to Brutus; send you very shortly my Treatise on Glory; and finish for you the other work, to be locked up with your treasure.

B. LEWIS, *Professor.*

ENGLISH LANGUAGE AND LITERATURE.—SCHOLARSHIPS OF THE SECOND AND THIRD YEARS.

1. What was the relative position of English and Norman-French for two centuries after the Norman Conquest?
2. When did the use of French cease, (1) in the schools, (2) in the courts of law?
3. Quote any passage from Robert of Gloucester, which bears upon the history of the English language. Or give the substance of such a passage in your own words, and comment upon it.

Appendix D. — Examination Papers for Scholarships.

4. What is Spenser's "Faerie Queene"? What is the design of that poem?

5. Enumerate Ben Jonson's plays. What were the relations between Ben Jonson and Shakespeare?

6. Sketch the plot of "Macbeth."

ENGLISH LANGUAGE AND LITERATURE.—SENIOR SCHOLARSHIP.

1. Give some account of the Vision of Piers Ploughman.

2. Sketch the plot of Chaucer's Canterbury Tales.

3. Account for the dearth of English poetry from Chaucer to Spenser. Review the Scottish poetry during that interval.

4. State the plot of Shakespeare's "Julius Cæsar."

HISTORY.

5. What was the constitution of the Witenagemot?

6. Explain the terms *scyre-gemot, scyre-gerefa, ealdorman, wer-gild, boc-land.*

7. Trace the origin of the Feudal System.

8. Describe the ceremonies used in conferring a fief.

9. Estimate the results of the Norman Conquest.

10. What changes in the administration of the law were introduced in the reign of Henry II.?

ENGLISH LANGUAGE.—SCHOLARSHIPS OF THE FIRST YEAR.

1. Give the derivation of these words: *contribute, republic, constitution, aristocracy, democracy, monarchy.*

2. Explain the use of the infinitive in these sentences:—

(*a.*) *To walk* in the country is pleasant.
(*b.*) He loves *to ride.*
(*c.*) This coat is too good *to throw* away.

3. Show that Anglo-Saxon and Norman-French form the groundwork of the English language. What other languages have contributed to our vocabulary?

4. What effects resulted from the Roman occupation of Britain? What is meant by the Latin of the First Period?

HISTORY.

5. Sketch the character of Themistocles.

6. Describe the sack of Rome by the Gauls.

WILLIAM RUSHTON, *Professor.*

MODERN LANGUAGES.

Translate into French, Italian, or German:—

No other disposition or turn of mind so totally unfits a man for all the social offices of life as indolence. An idle man is a mere blank in the creation; he seems made for no end, and lives to no purpose. He cannot engage himself in any employment or profession, because he will never have diligence enough to follow it; he can succeed in no undertaking, for he will never pursue it; he must be a bad husband, father, and relation, for he will not take the least pains to preserve his wife, children, and family from starving; and he must be a worthless friend, for he would not draw his hand from his bosom, though to prevent the destruction of the universe. If he is born poor he will remain so all his life, which he will probably end

in a ditch, or at the gallows; if he embarks in trade he will be a bankrupt; and if he is a person of fortune his stewards will acquire immense estates, and he himself, perhaps, will die in the Fleet.

It should be considered that nature did not bring us into the world in a state of perfection, but has left us in a capacity of improvement, which should seem to intimate, that we should labour to render ourselves excellent. Very few are such absolute idiots, as not to be able to become at least decent, if not eminent, in their several stations, by unwearied and keen application; nor are there any possessed of such transcendent genius and abilities, as to render all pains and diligence unnecessary. Perseverance will overcome difficulties which at first appear insuperable; and it is amazing to consider, how great and numerous obstacles may be removed by a continual attention to any particular point.

1. Give the principal rules on the use of the subjunctive mood and illustrate them by examples.
2. What influence had the French language on the formation of the modern English?
3. At what time and in what manner did the French language principally consolidate itself?
4. Enumerate Racine's best tragedies.
5. What is the principal character of his works?
6. State what you know of the characteristics of the chronicles, memoirs, and of history, in French literature.
7. What was the influence of Dante on the Italian language and literature?
8. State what you know of the life of Tasso, and characterize his epic poem.
9. Enumerate the principal languages of the Teutonic family.
10. Give a short account of the life of Schiller.

MATHEMATICS.—SENIOR SCHOLARSHIP.

1. Show that the number of permutations of n things taken r together in which p identical things always occur, is $\frac{\lfloor n-p \rfloor \lfloor r}{\lfloor n-r \rfloor \lfloor n-p \rfloor \lfloor p}$

2. Prove that $N^{n^r-n^{r-1}}$ is divisible by n^r, when n is prime and N not divisible by n. Show also that any number in the scale whose radix is $2n$, ends in the same digit as its nth power.

3. Find the value of $\left\{1+\sqrt{-1}\tan\frac{a}{n}\right\}^n$ when n increases without limit.

4. Sum to n terms the series

$$\cos\theta\cos^2\frac{\theta}{2}\operatorname{cosec}^2\left(\frac{3}{2}\theta\right)+\cos 3\theta\cdot\cos^2\frac{3}{2}\theta\operatorname{cosec}^2\frac{3^2}{2}\theta+$$
$$\cos 3^2\theta\cos^2\frac{3^2}{2}\theta\operatorname{cosec}\frac{3^3}{2}\theta+\ldots\ldots$$

5. If CD be the semi-diameter of an ellipse conjugate to CP, and if DQ be drawn parallel to SP and CQ perpendicular to DQ, prove that CQ is equal to semi-axis minor.

6. Prove that the co-ordinates of the focus of the parabola

$$A^2x^2-2ACxy+C^2y^2+2Dx+Ey+1=0$$

are $\frac{C^3+C^2E+A^2C+2ADE}{2(A^2+C^2)(AE+CD)}$ and $\frac{A^3+A^2D+AC^2+2CDE}{2(A^2+C^2)(AE+CD)}$

the axes being rectangular.

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Examination Papers for Scholarships.

7. Find the differential equation of the curve described by one of the foci of an ellipse which rolls on a straight line.

8. Find the particular function of x and y that z must be to satisfy both the differential equations $z=px+qy$, $z^2=px^2+qy^2$.

9. If θ be the angle that the tangent at (x, y) makes with the axis of x, prove that

$$\left(\frac{d^2x}{d\theta^2}\right)^2+\left(\frac{d^2\phi}{d\theta^2}\right)^2=\rho^2+\left(\frac{d\rho}{d\theta}\right)^2$$

10. Evaluate the integral

$$\int_0^a \frac{1}{\sqrt{a^2-x^2}}\,dx,\quad \int_0^\pi \frac{dx}{1+\cos d\cos x},\quad \int_0^\pi \cos(\sin x)\,dx.$$

11. Show how to differentiate an integral with respect to any quantity involved in it.

Differentiate $\int_{(a-4)}^{3a} \frac{dx}{6a-x}$ with respect to a.

12. A and B are two fixed points, P a point which moves in space, so that PA : PB in a constant ratio; find locus of P.

13. Show that the equation to an enveloping cylinder of an ellipsoid is

$$\left(\frac{x^2}{a^2}+\frac{y^2}{b^2}+\frac{z^2}{c^2}-1\right)\left(\frac{\lambda^2}{a^2}+\frac{\mu^2}{b^2}+\frac{\nu^2}{c^2}\right)=\left(\frac{\lambda x}{a^2}+\frac{\mu y}{b^2}+\frac{\nu z}{c^2}\right)^2$$

where $\frac{x^2}{a^2}+\frac{y^2}{b^2}+\frac{z^2}{c^2}=1$ is the equation to the ellipsoid, and λ, μ, ν the direction cosines of the generating line of the cylinder.

CHEMISTRY.—SENIOR SCHOLARSHIP IN ARTS OF THE FOURTH YEAR.

1. Show that in a given measure of carbonic acid there is contained its own volume of oxygen.

2. Point out the manner in which the density of a vapour is taken.

3. Point out the changes which take place when hyposulphite of soda, water, and bromine are heated together.

4. Give the formula, the mode of preparation, and the properties of the hydrogen compounds of phosphorus.

5. In the square prismatic system a prism of the second order is derived from the primary octahedron. Show how this is effected. Give the notation of its faces.

6. How is the atomic weight of an organic acid ascertained? Calculate the formula of an acid, the atomic weight of which is 122, and which gives in 100 parts on combustion—

C	68·85
H	5·00
O	26·15
	100

7. Describe shortly the metallurgy of zinc.

8. What is the difference between an empirical and a rational formula? Calculate the empirical formula of a substance which gives in 100 parts on combustion—

C	54·54
H	9·10
O	36·36
	100

9. Write out, according to the type on which each compound is formed, the formula of a monatomic alcohol and of its corresponding glycol.

10. Explain the true nature of a natural fat, such as stearine. Describe the changes which take place in saponification of the fats with an alkali.

11. Describe generally the monamines and monamides, and the way in which they are prepared.

12. Give the names and formulæ of the polymers of cyanic acid.

CHEMISTRY.—SECOND YEAR SCHOLARSHIPS IN MEDICINE AND ENGINEERING.

N.B.—The Names and Faculty of each Student are to be written on the first page of each book.

Answers to any *ten* of the following questions will be considered sufficient.

1. Give the composition by weight and by volume, and the different modes for the preparation of carbonic oxide.

2. In what respects does the process for preparing hydriodic acid differ from that for hydrochloric acid? Give the best tests for the two acids.

3. How is hyposulphite of soda prepared? State what are the properties of this salt, and of the acid when separated from its base.

4. Write the formulæ of anhydrous and of hydrate of potash on the water type.

5. Write in symbols the reactions which take place on passing chlorine into a solution of protosulphate of iron. How would you show that the salt has been changed?

6. How are the two oxides of copper prepared? With what compound is the black oxide isomorphous?

7. Give the formulæ of the oxygen compounds of chromium. State how the chromate and the bichromate of potash are prepared from chrome iron ore.

8. Metallic mercury is boiled with strong sulphuric acid and evaporated to dryness, and the residue is sublimed with chloride of sodium. To the sublimate a solution of ammonia in water is added: describe the various reactions which take place.

9. Arsenic and antimony are in the same solution. How would you detect their presence, and distinguish the one from the other, by means of nascent hydrogen?

10. How would you ascertain the presence of nitrogen in an organic substance? Describe the process of Will and Varrentrapp for estimating the amount of this element.

11. What is the difference between a homologous and a heterologous series? Illustrate by examples.

12. Describe a saturated and a non-saturated compound. Illustrate them from some of the hydrogen compounds of the tetratomic element carbon.

13. Write according to its type the formula of ethylsulphuric acid. Give some of its properties.

14. How are the simple and compound ethers of a monatomic alcohol formed? Write the formula of one of each kind of ether.

15. What is the supposed constitution of the organic alkaloids? Give a general formula representing the constitution of conine, and the class to which it belongs.

16. Point out the distinction between atoms, equivalents, and molecules. Write according to molecular and to atomic notation the union of ammonia with hydrochloric acid.

J. BLYTH, *Professor.*

Appendix D. NATURAL PHILOSOPHY.—MEDICAL SCHOLARSHIPS OF THE SECOND YEAR.

Examination Papers for Scholarships.

1. A square is placed vertically in water, having one angle in the surface and diagonal vertical; compute the pressure on the surface.

2. A luminous point is placed between two mirrors inclined at an angle; show that the images formed by the mirrors lie in the circumference of a circle.

3. What is the form of the crystalline lens in the eye of a fish? Assign an optical reason for the peculiarity of its form.

4. Describe Nicol's prism and its use.

5. Describe Bunsen's galvanic battery.

6. Magnetic properties can be conferred on an iron bar, by mechanical action, by induction of a magnet, or by an electric current. Describe experiments to exemplify each method.

7. How is it shown that frictional electricity possesses the power of producing heat and chemical action?

8. Explain some method of determining the dew point.

9. Describe the mode of action of an electrical condenser.

10. If a metallic disc be rotated between the poles of a powerful magnet, the disc becomes heated; how do you explain this?

JOHN ENGLAND, A.M., *Professor.*

BOTANY AND ZOOLOGY.

1. Describe the floral envelopes of any British grass.

2, 3. Compare the fruits of the currant, strawberry, and pear, with the flowers from which they have been developed.

4. Describe the foliage of the Ash, Beech, Sycamore, and Yew.

5. Name the natural orders which yield the following poisonous plants: —Aconite, Digitalis, Henbane, Lobelia, and Tobacco.

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6. How is the ingestion of nutrient matter effected among the anenterate worms?

7, 8. Give some account of the skeleton of Echinus.

9. Define carefully any order, or larger division, of Reptiles.

10. Name the principal families of carnivorous mammals, commenting briefly on their geographical distribution.

J. REAY GREENE, B.A., M.D.

PHYSICAL GEOGRAPHY AND GEOLOGY.—SENIOR SCHOLARSHIP IN NATURAL SCIENCE.

1. What are the circumstances necessary for the production of coral islands?

2. What cause prevents the formation of a delta at the mouth of the river of the Amazons?

3. Describe the features which mark metamorphic rocks; and give the names and compositions of some of these rocks.

4. What is the position, and what are the characteristic fossils of the Skiddaw, Slate, or Shelar group of rocks.

5. Give the divisions of the Permian formation as this occurs in the county of Durham; and name some of its characteristic fossils.

6. To what formation do reptiles of the order Samoptuygia appertain? and name some of the forms of these reptiles.

7. What are the mammal remains which have been obtained from the Purbeck strata?

8. Give the series of strata which make up the Eocene group of the Isle of Wight, and name some of the characteristic fossils.

9. What is the mineral nature of the Miocene strata of Switzerland; and name some of the plant remains which occur therein?

Examination Papers for Scholarships.

GEOLOGY AND MINERALOGY.—ENGINEERING SCHOLARSHIP OF THE THIRD YEAR.

1. To what group of rocks does Chlorite-schist belong, and what is its mineral composition?
2. What forms do Basaltic Rocks assume, and what minerals compose these rocks?
3. What is the position of the Upper Llandovery, or May Hill Sandstones? and name some of the most characteristic fossils of these rocks.
4. What is the position of the Eifel Limestone, and what its most characteristic fossils?
5. What is the position of the Rock-salt deposits of the British Isles; and what are the rocks usually associated with this substance?
6. What are the groups of strata which make up the Cretaceous formation; and name some of the fossils which make these groups?
7. What is the position of the Numulitic Limestone; and what fossils are most common thereto?
8. Where in England are the Pliocene deposits represented, and what is the arrangement of these?
9. What is the system of crystals to which Fluor-spar belongs, and in what forms does this mineral usually occur?
10. What are the minerals which are composed of combinations of sulphur and iron?

ROBERT HARKNESS.

FACULTY OF LAW.

PERSONAL PROPERTY.—SCHOLARSHIP OF SECOND YEAR.

1. To what extent can a man appropriate an animal he has tamed?
2. If a chattel real or personal be assigned to "A and the heirs of his body," what estate therein has A? Explain the principle on which this depends.
3. Can a "chose in action" be legally assigned? How is the technical rule on this subject evaded?
4. Show how a contract may be void by reason of the nature of the consideration, or of the promise founded thereon.
5. What is meant by a bond being single; and what happens if the condition of the bond be not performed? And what is the effect of some part of the condition being illegal, and other parts not?
6. What effect has an adjudication in Bankruptcy on the real and personal estate respectively of the Bankrupt, and on what property, although vested in him, is it inoperative?
7. What are the respective technical appellations of a person addressing a bill of exchange to another desiring him to pay a third a certain sum of money, of the person to whom it is addressed, and of the person to whom he is desired to pay the money?
8. What is the effect of an endorsement of a bill of exchange after its maturity, that is, when overdue, as between the endorser and acceptor?
9. What is a bill of lading—its form, object, and effect? How does its endorsement for valuable consideration operate on the consigner's right of "stoppage *in transitu*?"
10. What is a *del credere* commission?
11. What court has jurisdiction as to wills of personalty and the administration of the personal estate of intestator, and state the effect of the Statute of Distributions, as to the rights of the widow (if one), and the

Appendix D. Examination Papers for Scholarships.

next of kin of an intestate to shares of the personal estate and effects of an intestate, and the distinction between shares taken per *stirpes* and per *capita*.

SMITH'S "LEADING CASES."—SCHOLARSHIP OF THIRD YEAR.

1. A remits the sum of £100 to B, and afterwards informs B that the remittance is intended to be paid over to C. Is anything further essential to enable C to recover the money in an action against B?

2. What principle as to the admissibility of evidence, was decided in the case of "Price *v.* Torrington" (Salk. 285)? What comment on this case is reported to have been made by Lord Abinger, *C. B.*, in his judgment in the case of Brain *v.* Preece (11 Meeson & Welsby, 773)?

3. How is the rule of pleading laid down in the case of Rice *v.* Shute (Burroughs, 2611) affected by the Common Law Procedure Act (16 & 17 Vic., cap. 113, secs. 84 to 91)?

4. If a party occupy land, and pay rent for it under a panel agreement to hold for a term of seven years, what is the nature of the tenancy? and assuming it to continue until the expiration of the term of seven years, is a notice to quit essential to enable the landlord to re-enter? Refer to the leading cases on this question.

5. Is the principle affirmed in the case of Godsall *v.* Boldero still law? What is the law in Ireland where a policy of life assurance contains no averment of an interest by the insurer in the life assured?

6. State the rule of construction upon which the decision of the Court, in Roe *v.* Tranmar (Willes, 632), was founded.

7. State the maxim of law on which the decision in the case of Merryweather *v.* Nixon (8 T.R., 186), is grounded.

EQUITY (STORY).—SCHOLARSHIP OF THIRD YEAR.

1. What cases of accident are relievable in a Court of Law, and what cases cannot be relieved against even in Equity? What considerations govern a Court of Equity in granting relief in such cases?

2. Define the kind of concealment in dealings and contracts between parties which will amount to fraud in the sense of a Court of Equity, and for which it will grant relief.

3. A mortgages two estates to B. Afterwards A mortgages one of the same estates to C and the other to D, by distinct mortgages, C and D each having notice of the first mortgage to B. The mortgaged estates turn out not to be sufficient to pay all the three mortgages. In such a state of facts, as between himself and B (the first mortgagee) has D a right to have the estates marshalled so as to throw the whole of the first mortgage on the property mortgaged to C?

4. Where an estate is conveyed or devised on trusts which fail altogether, or which cannot take effect, what takes place?

5. What was the principle decided in the cases of Tullett *v.* Armstrong, 4 Mylne & Craig, 377; and Scarborough *v.* Borman, 4 Mylne and Craig, 379, cited in 2 Story, page 602?

6. What are the objects respectively of a bill of "discovery," "to perpetuate testimony," and a bill "de bene esse;" and what is requisite to enable a plaintiff to sustain a bill "de bene esse"?

7. Describe or give an instance of an estoppel in Equity.

EQUITY.—SCHOLARSHIP OF SECOND YEAR.

1. Explain the jurisdiction at common law of the Lord Chancellor, as distinguished from his jurisdiction in Equity, and his authority for the protection of Infants and Lunatics, and its nature.

2. Give an example of an implied resulting trust and a constructive trust respectively, and explain the principle on which each is founded.

3. Describe the doctrines of "conversion," "satisfaction," and "election" in Equity.

4. Give some instances illustrative of the doctrine that Equity considers what is agreed to be done as having been actually done.

5. What is an Equitable Mortgage, and how may it be created?

6. What classes of litigation are exclusively the subject of the jurisdiction of a Court of Equity? Over what have Courts of Law and Equity a concurrent Jurisdiction?

7. When are the proceedings in Equity commenced by "Information"?

8. Upon what principle is the Jurisdiction of a Court of Equity in suits for the administration of assets founded? Explain the distinction between the application of Legal and Equitable assets.

9. What is Equitable waste?

10. Mention some of the purposes for which the protective jurisdiction of a Court of Equity is exercised and how it is enforced.

11. Upon what grounds does Equity exercise jurisdiction in partnership cases? On the death of one of several members of a firm in trade, what remedies, and against whom, has a creditor of the firm in Law and in Equity?

12. What is the Jurisdiction of a Court of Equity in matters relating to wills of real or personal property?

13. Distinguish between "trusts executed" and "executory," with respect to the manner of their administration in Equity.

REAL PROPERTY AND CONVEYANCING.—SCHOLARSHIP OF FIRST YEAR.

1. In what different ways may estates be held in reference to the number and connexion of their owners?

2. Explain the effect of the Statute "De Donis Conditionalibus" upon estates limited to a man and "the heirs of his body;" and what was the occasion and object of that Statute?

3. What is that kind of estate tail called which cannot be barred by the tenant in tail?

4. Explain the difference between the mode of barring an estate tail, properly so called, and an estate in quasi entail in leaseholds for lives renewable for ever.

5. To what kind of products does the doctrine of "emblements" extend?

6. Explain the terms "feoffee to uses," and "cestui que use."

7. What is the difference between common and special occupancy; and by what legislative provisions has the title by common occupancy been in effect put an end to?

8. What are the formal parts of a deed? In the following instances of variance between the "premises" and the "habendum" of a conveyance, state the result with reasons:—

PREMISES.	HABENDUM.
To A,	To hold to A and his heirs.
To A for life,	,, to A and his heirs.
To A for twenty-one years,	,, to A and his heirs.
To A,	,, to A from the death of B.
To A and his heirs,	,, to A for life.
To A and his heirs,	,, to A and the heirs of his body.
To A and the heirs of his body,	,, to A and his heirs.

9. What are the three species of rent at common law, and how may rents be created? A tenant for life makes a lease under a leasing power

Appendix D.
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for a term of years, and dies during a current gale. Who is entitled to receive the amount of the rent accruing due on the gale day next after the death of the tenant for life?

10. Distinguish between the kinds of real property which "lie in livery" and those which "lie in grant."

11. What was necessary, according to the Statute of Frauds, for the valid devise of freehold property? To what wills does the present Statute of Wills apply; and what requisites does it prescribe for the valid execution of a will?

12. By what general rules of construction are wills governed? Explain an *executory* devise.

13. For what period must a marketable title be shown to real estate, corporeal or incorporeal?

MICHAEL BARRY, *Professor.*

POLITICAL ECONOMY.

1. The President of the Liverpool Chamber of Commerce has stated in a recent report that considerable commercial uneasiness was caused by the fact of the joint-stock banks holding insufficient reserves; and by the extent to which the Bank of England employed the deposits of such banks without taking due note of their special character, these deposits being the reserves of the bankers to whom they belong, and in times of monetary pressure cannot with safety be employed by the Bank of England. State your opinion as to whether this reasoning, with reference to the employment of such deposits by the Bank of England, is correct, and the grounds for your opinion.

2. If you dissent from the policy of the Bank Charter Act, state the mode in which you conceive the currency of the country ought to be regulated, and your reasons.

3. Mill says it is not true that low wages, in the sense of low cost of labour, and common to the whole productive industry of the country enables such country to sell cheaper in the foreign market. State the reasons he gives for such conclusion: and if you differ from him, state the grounds of your dissent.

4. State the arguments that have been advanced for and against the existence of trades' unions, with your opinion as to the economical effect of such societies, and the reasons for such opinion.

5. Explain the manner in which profits are affected by improvements in production, and by the opening of new foreign trades.

6. Explain the way in which the general rate of profit is affected by an increase of capital accompanied by a proportionate increase in the population.

7. Mill gives one case in which a protecting duty might be desirable. Explain the principle on which he makes this exception to the general rule of free trade.

8. State the arguments for and against the paying off the National Debt (or any large portion of it), by raising a surplus annual revenue to be applied to such purpose. Say also your own opinion of the expediency of such a course, and the reasons for such opinion.

9. Explain the mode in which the economical condition of the labouring classes is affected by the introduction of machinery and other improvements in the processes of production.

10. State some of the exceptions made by Mill to the application of the principle of "laissez-faire," and the reasons he assigns for making such exceptions.

11. State the principles by which the legislature should be guided when imposing an income-tax. State, also, the principles which should be observed when taxing commodities.

ANATOMY AND PHYSIOLOGY.—MEDICAL SCHOLARSHIP OF THE SECOND YEAR.

1. Describe the microscopic characters of the structures entering into the teeth, and give an outline of their chemical composition.
2. Describe the interior of the left ventricle of the heart.
3. Describe the general and microscopic features of white fibrous tissue.
4. State the structure of the pulmonary lobules.
5. Give an outline of the mechanical construction of the thorax; mention the actions of the muscles engaged in the function of respiration.
6. Describe the microscopic features of a transverse section of long bone.

ANATOMY AND PHYSIOLOGY.—SCHOLARSHIPS OF THE FOURTH YEAR.

1. Describe the microscopic features of the vesicular nervous substance.
2. Describe the structure of the Pacinian corpuscles.
3. Describe the bronchial tubes and the structure of the air vesicles of the lungs.
4. What are the sources and mode of production of heat in the body?
5. State the functions of muscular tissue, and describe the microscopic features of striated muscular fibre.
6. Describe the position, connexions, superficial and deep arrangements of the medulla oblongata.
7. Describe the origin and course of the pneumogastric nerve; also mention the branches of distribution and communication.
8. Describe the duodenum intestine and the glands of Brunn.
9. Describe the follicles of Lieberkühn and the glands of Peyer.

ANATOMY AND PHYSIOLOGY.—MEDICAL SCHOLARSHIP OF THE THIRD YEAR.

1. Enumerate the branches of the pneumogastric nerve, and state the general distribution and function of each branch.
2. Describe the third ventricle of the brain.
3. Describe the structure and functions of the lymphatic vessels and glands.
4. Mention the constituents of the urine, the composition of urea and uric acid.
5. How may it be demonstrated that the spinal nerves are of a compound character, and that the spinal cord exercises power independent of that derived from its connexion with the brain?
6. Give an estimate founded on calculation and experiments, with respect to the time required for the passage of the total quantity of blood through the body.

PRACTICAL ANATOMY.

1. Describe the crural ring, and mention its relation to vessels; then describe the crural canal and the saphenous opening.
2. Describe the origin, insertion, relations, and structure of the rectus abdominis muscle.
3. Describe the attachments and relations of the peroneus longus and peroneus brevis muscles.
4. Describe the origin, course, relations, branches, and inosculations of the subscapular artery.

Appendix D.

Examination Papers for Scholarships.

5. Describe the origin, course, and branches of the median nerve.
6. Describe the origin, course and relations of the internal pudic artery; name the branches of the vessel.
7. Describe the eight specimens placed before you.

PRACTICAL ANATOMY.—MEDICAL SCHOLARSHIP OF THE FOURTH YEAR.

1. Mention the boundaries and contents of the popliteal space.
2. Describe the origin, course, and relations of the great sacro-ischiadic nerve.
3. State the several relations of the prostate gland and the mode of exposing it by dissection.
4. State the origin, course, and relations of the arteria innominata.
5. Mention the steps which you would take in order to examine the membranes of the brain, and afterwards for the removal of that organ from the cranial cavity.
6. Describe the course and relations of the brachial artery.
7. Describe the eight specimens placed before you.

J. H. CORBETT.

PATHOLOGY.—FOURTH YEAR SCHOLARSHIP.

1. What is the condition of the blood in rheumatism, and what parts of the body are principally affected by it?
2. What is the difference between the condition of the blood in chlorosis and anæmia?
3. What are the several causes of general anasarca, and the explanation of its mode of formation in each case?
4. What is the change in the specific gravity of the urine caused by Bright's disease? The explanation of the change and the tests to be used?
5. What is the colour of the skin in advanced cirrhosis of the liver and the appearance of the bile found in the gall bladder?
6. How is secondary cancer produced?
7. What metamorphosis is tuberculous matter likely to undergo?
8. What parts of the body are most liable to this disease in the different periods of life?
9. What disease is the brain most liable to in childhood, and what in advanced period of life, and the cause of this difference?
10. What is the effect of adherence of the pericardium on the size of the heart, and the reason of this chance?

DENIS C. O'CONNOR, A.B., M.D.

SURGERY.—FOURTH YEAR'S SCHOLARSHIP.

No. 1.—Describe the pathology of traumatic fever, the symptoms, duration, result, and treatment, and also of Hectic Fever.

No. 2.—What are the productive inflammatory changes of the nutritive process, and what the destructive?

No. 3.—In what regions of the world is the Dracunculus endemic? What is its natural history, and size, the symptoms of its existence, its effects, and the treatment for its cure?

No. 4.—What are the varieties of adenocele of the female breast, the symptoms and effects, the prognosis, and treatment?

No. 5.—Describe the structure of the male urethra, and from what conditions of it do strictures proceed, and what are they called; also state the

symptoms and effects of each, and the different appropriate methods of treatment, and the operations for permeable and impermeable strictures. *Appendix D.* Examination Papers for Scholarships.

No. 6.—What are the symptoms of fracture of the neck of the femur within the capsule? How are they repaired, and how distinguished from dislocation of the hip joint on the dorsum of the ilium? Describe accurately the treatment for each of those injuries.

No. 7.—Describe Hey's and Chopart's operations on the foot, and Symes and Perigoff's at the ankle.

PROFESSOR TANNER.

MIDWIFERY.—FOURTH YEAR'S MEDICAL SCHOLARSHIP.

1. To what class of membranes would you refer the amnion? Describe minutely its origin and mode of formation. What purposes does it serve; and to what diseased conditions is it liable?

2. You are asked your opinion as to the relative rank and importance of the uterus and the ovary in the female economy. Give arguments derived from human and comparative anatomy and physiology, as well as from pathology, in support of your views on this question.

3. Enumerate the principal displacements to which the gravid uterus is liable; their causes, diagnosis, and treatment.

4. What effects on the progress of a labour are to be expected from the early rupture of the membranes; and how are these effects supposed to be produced? Do they always follow; what concomitant circumstances are occasionally found to mitigate them?

5. What powers besides that of simple traction, should the forceps possess, so that its use might be safe and efficient in cases of moderate disproportion? Under what circumstances may these powers be availed of, and within what limits may they be exercised?

6. A woman, a few days after delivery, is suddenly seized with febrile symptoms; it may be ephemeral fever, or it may be puerperal. Give the points of difference between these two diseases, on which you would rest your diagnosis.

J. (R.) HARVEY, *Professor of Midwifery.*

THERAPEUTICS.—SENIOR SCHOLARSHIPS.

1. What are the chief modes of ascertaining the therapeutical value of medicinal agents? What are the advantages and disadvantages of each?

2. What circumstances modify the absorption of medicines, and how do they affect it?

3. How do stimulants affect the various organic functions, and how do the various agents of this class differ in therapeutical results?

4. What are the arguments for and against the necessity of medicines passing through the circulation before exercising a remote action?

5. How are the chief pathological alterations of the blood susceptible of modification by remedial agencies?

6. How do diuretics affect the removal of abnormal collections of fluid in the organism?

7. In what cases can we expect useful results from the administration of emmenagogues with a view to restore deficient or suppressed menstruation?

MATERIA MEDICA.—SCHOLARSHIPS OF THIRD YEAR.

1. Describe the reactions which take place in the preparation of Chloroform.

2. How does the physiological action of Tartar emetic differ from that of Sulphate of Zinc?

Appendix D.

Examination Papers for Scholarships.

3. Opium: Mode of obtaining; physiological action; therapeutical uses; action of its active constituents; doses of these and their preparations.

4. Describe the physiological action; and specify the therapeutical applications of the preparations of bismuth.

5. What is the test for rhubarb?

6. Muriate of Ammonia: Chemical composition; tests; physiological action; therapeutical uses; doses; correctives; modes of administration.

7. What are the more common adulterations of sulphate of quinine, iodide of potassium, and sulphuric ether; and how are they detected?

PROFESSOR PURCELL O'LEARY, *Examiner.*

Appendix E.

APPENDIX E.

Table giving List of Classes, No. of Lectures, and Students attending same.

TABLE giving LIST of CLASSES, NUMBER of LECTURES, and of STUDENTS attending same.

	No. of Lectures Weekly.	No. of Students.	No. of Lectures.
Greek,	10	49	253
Latin,	9	45	211
English Literature,	3	14	61
,, Language,	3	37	26
History,	3	7	64
French,	9	89	225
Mathematics,	9	57	187
Chemistry,	3	68	70
Practical Chemistry,	7	30	45
Natural Philosophy,	14	82	260
Natural History,	3	57	75
Political Economy,	3	5	24
Geology and Mineralogy,	3	11	72
Logic,	3	13	36
Metaphysics,	3	4	60
Engineering,	12	28	269
Anatomy and Physiology,	5	96	108
Practical Anatomy,	5	57	
Surgery,	3	28	64
Midwifery,	3	25	58
Medicine,	3	36	59
Materia Medica,	3	29	74
Medical Jurisprudence,	4	31	36
English Law,	9	14	72
Civil Law,	6	11	48

Appendix F.

APPENDIX F.

Form of Circular from President, and special Reports of the Professors.

SPECIAL REPORTS of the PROFESSORS, with FORM of CIRCULAR from PRESIDENT.

RETURN to be filled up by the Professor of , and to be returned to the Registrar, so filled up, for the official information of the President, on or before the , being for the Collegiate Session, 186 -6 .

A.—As to the Course or Courses of Lectures given by the Professor. 1st. Duration and extent of the Course; number of Terms. 2nd. Number of weeks of Lectures in each Term. 3rd. Number of Lectures weekly, and days and hours of Lectures.

B.—The description or title of the Course or Courses of Lectures delivered, and a general abstract of the subjects of instruction contained in the Course, and the title of the Text-books recommended.

Appendix F.

Form of Circular from President, and special Reports of the Professors.

C.—Whether the Lectures are illustrated by reference to maps, diagrams, specimens, or experiments; and a general notice of the kind of illustrations used.

D.—Whether any method of Tutorial, or other special instruction, is employed, as by setting out portions of Text-books for lessons, by themes, or exercises in composition, or problems; and whether Special Class Examinations are held, and at what time; or whether Herborization Excursions, or Field Exercises, are given.

E.—What Faculties or division of Students are those attending Courses of Lectures of the Professors making the return.

F.—The number of Students attending each Course—distinguishing Matriculated and Non-Matriculated Students; and the general regularity of attendance.

G.—The general conduct of Students at the Professor's Lectures; and the general state of discipline as regards the Professor's Classes.

H.—The general condition of the department of which the Professor has charge, as to supplies, fitments, cleanliness, and accommodation, for the purposes of instruction.

The Professor, in making the above returns, is requested to mark the answers with the letter designating the portion of the form of return, as above, to which each answer refers.

Signed by order of the President,

, *Registrar.*

RETURN OF THE PROFESSOR OF GREEK.

A.—1. The course extended over three terms. 2. The first term contained 7 weeks of lectures; the second, 13; and the third, 5. 3. Ten lectures were given weekly, viz., 2 on each day, except Saturday.

B.—The Greek language and literature, portions of Plato, the Greek tragedians, Homer, Thucydides, and Demosthenes were read in class.

C.—The lectures were illustrated by maps hung on the walls of the lecture-room.

D.—Portions of the authors read were prepared by the students in the intervals between the lectures, in which they were examined. Exercises in prose and verse were required, according to the proficiency of the students.

E.—The students belonged exclusively to the Faculty of Arts.

F.—The lectures were attended by fifty students, all matriculated.

G.—The general conduct of the students was satisfactory, and the discipline good.

H.—The general condition of the department as to supplies, fitments, cleanliness, and accommodation was satisfactory.

JOHN RYALL, *Professor.*

REPORT of the PROFESSOR of LATIN for the SESSION 1867–8.

A.—The course extended through three terms. First term, 8 weeks; second term, 11 weeks; third term, 5 weeks. Junior class, 4 lectures weekly; senior class, 3 lectures weekly; extra and third year's class, 2 lectures weekly.

B.—The Latin language. Junior class: Livy, part of Book XXIII.; Horace—Satires, Book II., 1–3. Senior class: Juvenal—Satires, 10–12; Cicero—De Officiis, part of Book I. Extra and third year's class: Lucretius, part of Book II.; Tacitus—Histories, part of Book II.

Appendix F. — Reports of the Professors.

C.—The lectures were illustrated by references to the art collections belonging to the college.

D.—The students prepared a portion of the text-book for each lecture; they also wrote Latin exercises in prose and verse.

E.—Students in Arts.

F.—Forty-five, all matriculated.

G.—Satisfactory.

H.—Satisfactory.

B. LEWIS.

PROFESSOR'S RETURN in HISTORY and ENGLISH LITERATURE.

A.—1. History; two terms. English Literature; two terms. English Language; one term. 2. First term, 9 weeks; second term, 12 weeks. 3. Three lectures a week in each subject, namely:—History—Monday, Wednesday, and Friday, 12–1. English Literature—Tuesday and Thursday, 12–1; Saturday, 11–12. English Language—Tuesday and Thursday, 11–12; Saturday, 10–11.

B.—History—France: 1589–1815. Great Britain and Ireland: 1589–1815. English Literature—History of English Poetry from Chaucer to Pope. Chaucer: Canterbury Tales, Prologue. Shakespeare: Othello. Exercises: Analysis of Burke's Reflections on the Revolution in France. English Language: Craik's Outlines of the History of the English Language. Milton: Paradise Lost, Book I. Shakespeare: Richard III.

C.—The lectures on History are illustrated by reference to Bell's Historical Tables, and Von Spruner's maps.

D.—Tutorial instruction is given upon the authors appointed to be read. Lectures are delivered upon History and Literature. Exercises in Analysis. Translations: Original Essays.

E.—Arts and Medicine. Matriculated.

F.—History, 7 students. English Literature, 14. English Language, 26. Attendance regular.

G.—Conduct good.

H.—Satisfactory.

WILLIAM RUSHTON, *Professor.*

RETURN for the official information of the President for the Collegiate Session, 1867–68.

A.—There were three courses of lectures given by the Professor of modern languages on the French language and literature. The first course for medical students; the second (senior French), for arts and engineering students; the third course (junior French) also for arts and engineering students.

1st. The three courses extended over three terms, namely, the whole Session.

2nd. The first term comprised 9 weeks; the second, 13; and the third, 6 weeks.

3rd. There were three lectures weekly in each course, from 12 to 3; Mondays, Wednesdays, Fridays.

B.—The courses of lectures were on Syntax, comparative Grammar, French Literature; the text-books were, in the medical French class, Achille Comte's "Lectures sur les Sciences," "Litterature Medicale" *de Baratte;* in the Senior French class, Racine's "Britannicus," Lafontaine, Pascal, Demogeot's "Litterature Française;" in the Junior French class, Demogeot's "Litterature," Racine's "Britannicus," Molière's "l'Avare."

C.—The lectures require no diagrams, &c.

D.—Both the tutorial and professorial methods were combined; exercises and compositions required weekly, with occasional examinations.

E.—The students belonged to the Faculties of Arts and Medicine, and the Engineering school.

F.—The number of students in the Medical French class was 51; in the Senior French class, 25; and in the Junior French class, 14. (76 lectures in each course). The general attendance satisfactory.

G.—The general conduct of the students was very good.

H.—The general accommodation and condition of the rooms was excellent.

R. DE VERICOUR.

REPORT OF THE PROFESSOR OF LOGIC AND METAPHYSICS.

A.—On Logic and Metaphysics.—1. Logic, one term; Metaphysics, 2 terms. 2. Two terms. Logic, Tuesdays, Thursdays, at 11 o'clock; and Saturdays at 9 o'clock. Metaphysics, Tuesdays and Thursdays, at 1 o'clock; Saturdays, at 10 o'clock.

B.—Logic, Deductive and Inductive—Aldrich, parts of Mill, Baynes, and Thompson. Metaphysics: History of Philosophy and Psychology; History of Philosophy of the University of France.

C.—No illustrations are used except such as are drawn or written on the board during the course of the lectures.

D.—Both the tutorial and professorial systems are used.

E.—Logic, second year's students in Arts; Metaphysics, third year's students in Arts.

F.—Logic, 13; Metaphysics, 4. All matriculated; attendance very satisfactory.

G.—Conduct of the students in the class-rooms unexceptionable.

H.—The inconvenience previously complained of has been remedied by a re-arrangement of the rooms, but a few fitments are still required.

G. S. READ.

REPORT OF THE PROFESSOR OF MATHEMATICS FOR SESSION 1867-68.

A.—1. The course consisted of three terms.

2. The first term contained 7 weeks, the second 13 weeks, and the third 5 weeks.

3. The regular lectures were given on Mondays, Wednesdays, and Fridays from 12–1, for 1st year; 1–2, for 2nd year; 2–3, for 3rd year.

There were also optional lectures during the second term for first year's students on Tuesdays and Thursdays, from 12–1.

B.—Subjects of lectures were:—1. *First year*—Euclid, Algebra, Trigonometry. 2. *Second year*—Spherical Trigonometry. Properties of Elementary Solid Figures. Analytical Geometry, Differential and Integral Calculus. 3. *Third year*—Solid Geometry, Differential Equations, Calculus of Variations.

The text-books recommended were:—Euclid; Todhunter's Algebra, Trigonometry—(1. Plane—2. Spherical), Conic Sections, Differential Calculus, Integral Calculus. Salmon's Conic Sections and Solid Geometry. Frost and Wolstenholme's Solid Geometry. Poole's Differential Equations.

C.—No special illustrations.

D.—The lectures, except those on Euclid, were to a certain extent independent of text-books. Problems were set at each lecture, and frequent *viva voce* examinations held. There were also written examinations at natural divisions in the course.

Appendix F.

Reports of the Professors.

E.—The students attending lecture were of the Arts and Engineering Faculties.

F.—They (in number 57) were all matriculated. Attendance was somewhat irregular.

G.—Conduct, &c., satisfactory.

H.—Fitments, &c., were satisfactory, except that it is desirable to have the lecture-room heated otherwise than by the stove.

C. NIVEN, *Professor of Mathematics.*

REPORT OF THE PROFESSOR OF NATURAL PHILOSOPHY.

A.—Five courses. 1. Each, 3 terms. 2. In the first term lectures were delivered during 7 weeks; in the second, 12 weeks; and in the third, 5 weeks. 3. In the senior class of Experimental Physics and the Honor Class in Mathematical Physics, 3 lectures were delivered in each week; in each of the other classes 2 lectures in each week.

B.—In the classes of Experimental Physics the subjects were—The Elements of Mechanics and Hydrostatics, Heat, Light, Electricity, and Acoustics; in Mathematical Physics—Mechanics, Hydrostatics, Optics, and Astronomy. In Engineering Physics—Practical Mechanics and Theory of the Steam Engine. Text-books—Ganôt, "Traite de Physique;" Todhunter's "Statics," Tait and Steel's "Dynamics," Brinkley's "Astronomy," Parkinson's "Optics," Twisden's "Practical Mechanics," De Pambour's "Theory of the Steam Engine."

C.—The lectures were illustrated by experiments and diagrams.

D.—In Mathematical and Engineering Physics the tutorial method was used and problems proposed as exercises.

E.—The senior class of Experimental Physics was attended by students of the second year in Arts and the second year in Engineering. The Honor course in Mathematical Physics by students of the third year in Arts and third year in Engineering; the class of Engineering Physics by students of the third year in Engineering; the junior class of Experimental Physics by students of the first year in Medicine.

F.—Senior Class of Experimental Physics, 26; Junior, 53; Mathematical Physics (Honor), 2; Mathematical Physics (Engineering), 3; Engineering Physics, 4. The attendance was regular.

G.—The conduct of the students was satisfactory.

H.—The arrangements for carrying on the business of the department were satisfactory.

JOHN ENGLAND.

REPORT OF THE PROFESSOR OF CHEMISTRY.

A.—First course of 3 terms; first term of 7 weeks; second of 13 weeks; and third of 5 weeks. Three lectures per week, on Monday, Wednesday, and Friday, from eleven to twelve.

B.—First course; Systematic Chemistry, embraced the laws of combination; history of metallic and non-metallic substances; theories of organic Chemistry, and description of organic compounds. Text-books—Fownes, Graham, Kane, Miller, Regnault, Williamson, Roscoe. The second course was conducted in the laboratory.

C.—Illustrated by diagrams, specimens, and experiments.

D.—In the first course by lectures, and by explanations of difficulties after lectures to students. In the second course, each student works under the superintendence of the Professor.

E.—Students of the Faculties of Medicine, Engineering, and a few from Arts attend the first course. Medical students alone attend the second.

F.—In the first course, 64 matriculated and 4 non-matriculated; and in the second, or Practical Chemistry, 28 matriculated and 2 non-matriculated. The general attendance was good.

G.—The general conduct was good, except in the case of five students, who were brought before the Council.

H.—The department is well provided with supplies, fitments, and apparatus for instruction. The ventilation of the laboratories to which the attention of the Board of Works has been for years directed by the Council of the College has not yet been attended to in a proper manner, and is at present positively injurious to the health of students and Professors. The pressure of gas is also most insufficient during the day for the work of the laboratory.

J. BLYTH, M.D.

REPORT of the PROFESSORS in charge of the Class of MEDICAL JURISPRUDENCE.

A.—Three months, during which 36 lectures were delivered. The days of lecture were Tuesday, Thursday, and Friday.

B.—The subjects chiefly enlarged upon were toxicology, the rules of evidence in legal procedure, infanticide, wounds, insanity, &c. The text-books—Taylor, Guy, Beck; Paris and Fonblanque were also recommended for perusal by the students. The leading cases were referred to; for example, Lord Ferrer's case, the Duchess of Kingston's case, Hadfield's case, the Gardner and Douglas Peerage case, &c.

C and D.—By experiments, and lectures illustrated by them.

E.—Students of the Faculty of Medicine.

F.—There were 29 matriculated, and 2 non-matriculated in the class.

G.—The attendance, conduct, and discipline of the class were excellent.

H.—The class continues dependent on the Chemical department for apparatus and the materials necessary for the toxicological portion of this course.

J. BLYTH, M.D.
MICHAEL BARRY, B.L.

REPORT OF THE PROFESSOR OF NATURAL HISTORY.

A.—One course on Zoölogy and Botany. 1. The course consisted of 75 lectures, and extended over 3 terms. 2. The first term included 9, the second 12, and the third 5 weeks of lectures. 3. Three lectures weekly, at 3, P.M., on Mondays, Wednesdays, and Fridays.

B.—The course embraced lectures on the principles of Zoölogy and Botany, and on the Structure and Classification of Plants and Animals. The text-books used were Milne Edwards' Zoölogy, Dallas' Natural History of the Animal Kingdom, and Henfrey's Elementary Course of Botany.

C.—The lectures were illustrated by reference to specimens and diagrams. Herborizations were given during the third term.

D.—The professorial method of instruction was chiefly employed.

E.—The lectures were attended by students of the third year in Arts, and of the first year in Medicine; also, by non-matriculated students.

F.—Five students in Arts, 44 in Medicine, and 8 non-matriculated students attended with more than usual regularity.

G.—Satisfactory.

H.—As stated in last Report. As the Examination Hall has now been heated by hot water pipes, it is hoped that the same advantage, with as little delay as possible, may be extended to the Museum.

J. REAY GREENE.

Appendix F.

Reports of the Professors.

REPORT of the PROFESSOR of MINERALOGY and GEOLOGY for the SESSION 1867-68.

A.—The course of lectures given by the Professor extended over the three terms of the College Session; during the first term, 26; during the second term, 26; and during the third term 20 lectures were given. The number of lectures delivered weekly was 3, the days being Tuesdays, Thursdays, and Saturdays; the hours on Tuesdays and Thursdays being from 2 to 3, P.M.; and on Saturdays, 10 to 11, A.M.

B.—The course of lectures included Physical Geography, Mineralogy, Geology, and Palæontology, the books recommended being Hughes' Outlines of Physical Geography, Somerville's Physical Geography, Herschell's Physical Geography, Nicols' Manual of Mineralogy, Lyell's Elements and Principles of Geology, Jukes' Manual of Geology, Murchison's Siluria, and Owen's Palæontology.

C.—Maps, sections, diagrams, and specimens were used to illustrate the several lectures.

D.—The mode of instruction was professorial; field instructions were also given towards the end of the course.

E.—With the exception of one Arts student, the course was attended by students appertaining to the Department of Engineering.

F.—The number attending the course was 11, being, with the exception of the one before alluded to, all Engineering students of the first year, and the attendance was, on the whole regular.

G.—The conduct of the students during lectures was very good.

H.—The department over which the Professor has control is well supplied with fitments and other requisites; and, as regards cleanliness and accommodation, these are in every respect what the Professor could require.

ROBERT HARKNESS.

SPECIAL REPORT OF THE PROFESSOR OF GEOLOGY AND MINERALOGY IN ACCORDANCE WITH STATUTES, CHAPTER V., FOR THE INFORMATION OF THE COLLEGE COUNCIL, AND COMMUNICATED TO THE PRESIDENT.

The Professor of Geology and Mineralogy has to report, for the information of the Council, that since May, 1868, there have been added to his departments in the Museum a collection of fossil fish from the Newcastle coal-field, presented by T. P. Barkers, esq., which has been arranged and mounted, and is now in its proper place in the Palæontological Collection; and a series of fossils from the Norwich Crags, which has been purchased from Mr. J. E. Taylor of Norwich. This also has been arranged and mounted, and in connexion with the fossils from the Red and Coralline Crags, forms a very perfect illustration of the Pliocene fauna now in the Museum.

The whole of the British Palæontological collection is now arranged and catalogued. There are, however, some gaps in this collection which require filling up. Among these are the Devonian and Permian formations; and whenever funds are available these deficiencies will be supplied.

With regard to the mineralogical collections, these remain in the same condition as before. There has been no addition thereto, nor have losses been sustained in connexion with this department.

ROBERT HARKNESS.

May 25th, 1869

REPORT OF PROFESSOR OF CIVIL ENGINEERING.

A.—1. Each course of lectures extends through the three terms. 2. In the first term, 9 weeks; second. 13; third, 5. 3. Three lectures per week in each course. Students of first year, Monday, Wednesday, Friday, 10, A.M.; second year, Tuesday, Thursday, Saturday, 10, A.M.; third year, Monday, Wednesday, Friday, 12, noon. Office open Tuesday, Thursday, Saturday, from 10, A.M. to 2, P.M.

Total number of lectures:—

Students of first year, . . .	66
„ second year, . . .	64
„ third year, . . .	69
In office, ...	70
Total, . .	269

B.—*First year.*—Descriptive Geometry; Orthographic Projection; Shadows; Isometric Projection; Perspective; Principles of Architecture; Geometry of the Oblique Bridge. Text-books:—Hall's Descriptive Geometry; Engineer and Machinist's Drawing Book; Rickman's Architecture; Buck on the Oblique Bridge. *Second year.*—Surveying, Levelling, and Mensuration. Text-books:—Rankine's Civil Engineering; Cotton's Manual of Railway Engineering; Williams' Geodesy. *Third year.*—Materials used in Construction; Principles of Construction of Bridges, Roads, Railways, Canals; Hydraulic Engineering; Strength of Materials; Principles of Construction of the chief machines employed by the Engineers. *Drawing office.*—First year students are chiefly employed in drawing the problems given at lectures, and a few easy examples of their application. The second and third year's classes in making working drawings of examples of the subjects of lectures, and in mapping.

C.—Illustrated by reference to maps, drawings, and instruments.

D.—The tutorial and professorial methods of instruction are adopted, according to the subject of the lecture. Instruction is given in the field.

E. Students in the department of Civil Engineering.

F.

Students of	first year, . .	Mat.	10 .	Non. Mat.	0
„	second year, . .	„	14 .	„	0
„	third year, . .	„	5. .	„	0
			29		0

The majority of the students have attended tolerably regularly.

G. Conduct of students very good.

H. General condition of department good.

ALEXANDER JACK.

A.—1. Political Economy, 26 lectures; 2 terms. 2. Jurisprudence, 24 lectures; 2 terms. 3. Civil Law, 24 lectures; 2 terms.

B.—Political Economy—Rent, profit, and wages; commerce, taxation, currency, and banking. Text-books—J. S. Mill, Fawcett, Senior, Mills. Jurisprudence—Selections from the writings of Maine, Stephens, and lectures of the Professor. Civil Law—Sandars' Justinian.

C.—No.

D.—The tutorial and professorial methods are both employed.

E.—In Political Economy, Arts Students; in other subjects, Law Students.

F.—In Political Economy, six matriculated. In Jurisprudence, nine matriculated. In Civil Law, four matriculated.

G.—Very good.

R. H. MILLS.

Appendix F.

Reports of the Professors.

REPORT of the PROFESSOR of ENGLISH LAW.

A and B.—Three courses of lectures, comprising twenty-four, were given to each of the classes of the first, second, and third years. The subjects were, as prescribed, real property and conveyancing to the class of the first; personal property, equity, and the bankruptcy law to the second; and common and criminal law to the class of the third year. The text-books used in the several classes were Williams on Real Property, Williams on Personal Property, Smith on Contracts, Smith's Manual of Equity Jurisprudence, Smith's Leading Cases; Blackstone's Commentaries, and the several other books mentioned in the College prospectus were recommended for perusal.

C.—The subjects were elucidated by precedents, and as far as possible by practical cases and references to cases reported in the several law and equity reports.

D.—Tutorial, by the examination of precedents, &c., and by oral examination.

E.—Arts and Law.

F.—Fifteen. Nine in the class of the first year, four in the class of the second year, one in the class of the third, and one in the class of the fourth year.

G.—The conduct and attendance of the students were very good.

H.—Nothing occurs to me material to report in answer to this inquiry.

MICHAEL BARRY.

REPORT of the PROFESSOR of ANATOMY and PHYSIOLOGY for SESSION 1867–68.

A.—Two courses delivered daily (Saturday excepted) during the Medical Session: Anatomy and Physiology at one o'clock; Anatomical Demonstrations at twelve o'clock.

B.—One course entitled Anatomy and Physiology; the other course, Anatomical Demonstrations and Practical Anatomy. The dissections performed by the students are superintended by the Professor of Anatomy and by his assistants, Doctors Shinkwin and Jones, Demonstrators of Anatomy.

The course of Anatomy and Physiology comprehends the following subjects:—1. Nature of life and organization; general description of the vital functions; general and special description of the textures of the human frame; development of tissues and other branches of Histology; composition of the fluids, viz., the blood, lymph, chyle, saliva, gastric juice, bile, &c. 2. Physiological Anatomy of the organs of support and locomotion, circulation, respiration, digestion, chylification, absorption, secretion, excretion, reproduction; the brain and its membranes; the spinal cord and membranes; the ganglia and nerves; the organs of touch, smell, vision, hearing, taste; organ of voice, &c. 3. The course comprehends all branches of human Physiology; various subjects comprised in it are elucidated by reference to Comparative Anatomy and Physiology.

The course of Structural Anatomy is illustrated by microscopical preparations, &c.

The course of Anatomical Demonstrations includes the special description of the bones, joints, ligaments, arteries, veins, membranes, and fasciæ; it also embraces Regional and Surgical Anatomy.

The text-books are the following, viz.:—Todd and Bowman on Physiological Anatomy; Carpenter's Physiology; Valentin's Physiology; Kirke's Handbook of Physiology; Quain's Anatomy; Harrison's Anatomy; Gray's Anatomy; Ellis's Demonstrations; Corbett on the Arteries, &c.; Kölliker and Hassal on Microscopic Anatomy.

C.—The lectures are illustrated by recent and prepared dissections; by plates, diagrams, and anatomical preparations, &c.

D.—The students are examined *viva voce* upon subjects treated of in the course. Written replies to questions proposed are always received at the examinations held in October for Medical Scholarships, and at the Sessional Examinations in May.

E.—By students of Medicine and Surgery.

F.—The course of Anatomy and Physiology was attended by 96 students, 90 matriculated, 6 non-matriculated.

The course of Demonstrations and Practical Anatomy by 97 matriculated and 4 non-matriculated students.

G.—The students have attended the lectures with great regularity, and their conduct was exceedingly good.

H.—The Anatomical preparations, plates, charts, &c., are very good, but there is much necessity for additions to the Anatomical Museum. The accommodation has recently been much improved; the apartments are kept in a state of cleanliness.

J. H. CORBETT.

REPORT of the PROFESSOR of MATERIA MEDICA.

A.—One six months' course. Three lectures weekly, on Tuesdays, Thursdays, and Saturdays, from 3 to 4 P.M.

B.—Lectures on Materia Medica and Therapeutics, comprising general Pharmatology, Pharmacognosy, Pharmaco-dynamics, Pharmacy, Formulation and Posology. Hygiene and Balneology. Text-books—Pereira, Garrod, Fraser, Trousseau, and Pidoux's works.

C.—Illustrated by diagrams, chalk drawings on the board, and microscopical demonstrations.

D.—By microscopical demonstrations and exhibition of specimens of the Materia Medica from the College Botanical Garden.

E.—Students of the Medical Faculty.

F.—Forty-two students.

G.—Conduct most admirable; class extremely attentive.

H.—Lecture-room unfitted. Fireplace and windows in the wrong place. Great want both of materials for experiment and suitable apparatus, as well as of a special porter to assist in preparing the experiments.

PURCELL O'LEARY, B.L., A.M., M.D.

REPORT of the PROFESSOR of MIDWIFERY.

A.—Course of lectures on Midwifery.

1. Six months from November to April.

2.

3. Three lectures weekly, Monday, Wednesday, and Friday, at 4 o'clock.

B.—Midwifery. Physiology of the function of reproduction and gestation. Parturition in its various bearings, theoretical and practical. Diseases of childbed. Management of infants.

C.—Diagrams, casts, models, anatomical and other preparations, &c.

D.—

E.—Students of the Faculty of Medicine.

F.—Matriculated, 25; non-matriculated, 1. General attendance good.

G.—General conduct of the students very good.

H.—Supply of preparations, &c., for the illustration of the lectures still far from complete.

J. R. HARVEY.

Appendix F.

Reports from Professors.

REPORT of the PROFESSOR of SURGERY.

A.—1. Duration of course three terms.

3. Three lectures weekly, from four until five, P.M.

B.—On theory and practice of Surgery and operative Surgery. Books—Cooper's Dietaries; Erichesen, Paget, Holmes, Smith.

C.—Diagrams; specimens; practical demonstrations on subjects; instruments.

D.—Occasional examinations.

E.—Medical students.

F.—Matriculated, 26; non-matriculated, 4.

G.—Students' conduct and discipline excellent without exception.

H.—Condition of department extremely defective as to supplies, fitments, cleanliness; smell from dissecting-room during class hours is almost pestilential.

W. K. TANNER, M.

REPORT of the PROFESSOR of PRACTICE of PHYSIC.

A.—Lectures on the Practice of Physic, delivered from November 1st to 30th April—three terms first six weeks; the second and third varying with the time of Easter. Three lectures each week from three to four o'clock.

B.—The course embraces all the subjects of Internal Pathology, with the treatment and causes of the various diseases.

C.—Illustrated by pathological specimens and plates.

D.—The students are examined from time to time on the subjects of the course of lectures.

E.—Students of the Faculty of Medicine.

F.—Attended by 34 matriculated and 3 non-matriculated students.

G.—Nothing can exceed the good conduct and discipline of the students.

H.—There is a deficiency of the pathological specimens caused by the burning of the College.

DENNIS CHARLES O'CONNOR, A.B., M.D.

Appendix G.

List of successful Candidates.

APPENDIX G.

LIST of UNIVERSITY DEGREES, DIPLOMAS, and HONORS obtained by STUDENTS of QUEEN'S COLLEGE, CORK, at the COMMENCEMENTS in JUNE and OCTOBER, 1868; also the PEEL EXHIBITIONS.

LIST of DEGREES and DIPLOMAS conferred by the QUEEN'S UNIVERSITY of IRELAND in 1868, on STUDENTS from QUEEN'S COLLEGE, CORK.

DEGREE OF LL.D.

Sir Robert Kane, University of Dublin, *ad eundem.*
Owen Connellan, *Honoris Causa.*

DEGREE OF M.D.

Unclassed:
John M'Mahon Brown.
James M. Beamish, M.A.
James Chatterton, B.A.
Wm. B. Coghlan, M.A.
Timothy Crowley.
Humphry Donovan, B.A.
John Donovan.
James T. Fox.
Denis Harrington.
R. A. Jamieson, M.A.

Unclassed—*continued.*
John Lloyd.
Thomas Lumsden.
Edward M'Carthy.
Richard A. Mowle.
Patrick Murphy.
Wm. F. Newsam.
Richard R. O'Brien.
Michael O'Mally.
Patrick L. Walsh.

DEGREE OF M.A.

Second Class Honors:—Arthur H. Anglen, second rank in Mathematical Science.

DEGREE OF M.CH.

James M. Beamish, M.A.
James Chatterton, B.A.
John Donovan.
Richard A. Mowle.
John Lloyd.
Patrick Murphy.
Richard O'Brien.
Charles J. Purcell.
Wm. N. Robinson.
Patrick L. Walsh.

DEGREE OF B.A.

First Class Honors:—Joseph O'Brien, first in Ancient Classics.

Second Class Honors—
Charles H. Haines, second in Experimental Physics.
Richard Henry, second in Natural Sciences.

Third Class:—
Maurice C. Daly, third in Modern Languages.
Daniel N. Martin, third in Experimental Science.

Unclassed:—
Robert Allen.
Matthew J. Bourke.
Charles H. Crookshanks.
Thomas H. Gillman.
Bernard O'Connor.

BACHELOR IN ENGINEERING.

Third Class:—Roderick W. Kane.

DEGREE OF BACHELOR OF ENGINEERING.

Unclassed:—Robert A. Thompson.

FIRST UNIVERSITY EXAMINATION IN MEDICINE.

Unclassed.—
Robert Barry.
James M. Beamish, M.A.
Michael Cullinan.
J. T. Enright.
Richard Exham.
William J. Hastings.
Samuel Hawkes.
John R. Hayes.
James C. Holland.
Robert A. Jamieson, M.A.
Unclassed:—
Michael Kearney.
Christopher Lloyd.
Edward M'Carthy.
Daniel N. Martin.
R. W. O'Connor.
Augustine D. O'Connor.
John O'Neill.
William T. Sweetnam.
Frederick H. Smyth.
J. L. Sweetnam.

APPENDIX H.

Appendix H.

SPECIAL REPORT of the LIBRARIAN.

Report of the Librarian.

The number of volumes in the Library at date of this Report, April 11th, 1869, is 18,974. They may be classified as nearly as possible as follows:—

Pure Mathematics,	701	Celtic Literature,	63
Mixed do.,	581	History,	2,508
Chemistry,	955	Biography,	546
Geology, &c.,	614	Geography, Travels, &c.,	602
Botany and Zoology,	1,488	Engineering,	477
Medical Sciences,	2,076	Agriculture,	210
Theology & Ecclesiastical History,	330	Fine Arts,	195
Logic, &c.,	424	Bibliography,	96
Political Economy and Jurisprudence,	530	Encyclopædias, &c.,	625
Education,	181	Total,	18,974
Law,	829		
Ancient Classical Literature,	1,863		
English Literature,	1,292		
Modern European Literature,	1,508	Increase in number of volumes over last report,	445

The Library is largely availed of by the students, whose conduct and demeanour are excellent. With one exception I have had no occasion to report a breach of library discipline. In this case the student was detected in stealing a book, and was expelled by the College Council.

Five text-books have been missed from the Library during the year. Three of them were traced to the student alluded to; the remaining two are still unaccounted for.

Appendix II.

Report of the Librarian.

The Consulting Library is now heated by hot water pipes, and the danger (from damp) to the property contained therein thereby removed.

I have completed a new catalogue of the general library which has met with the approval of the Council and Library Committee, and am at present engaged on a similar catalogue of the books contained in the Consulting Library, which number about seven thousand.

Cleanliness and order are properly attended to.

The College booksellers, Messrs. Hodges, Smith, and Foster, attend to our orders with promptitude and accuracy.

MATTHIAS O'KEEFFE, *Librarian.*

APPENDIX I.

Appendix I.

Copies of Accounts furnished by Bursar.

COPIES of the several ACCOUNTS furnished by the BURSAR, showing the FINANCIAL POSITION of the College to 31st March, 1869.

ACCOUNT of EXPENDITURE of the ANNUAL PARLIAMENTARY GRANT of £1,000 for the Year ending 31st March, 1869.

DR.	£	s.	d.
To amount of Grant received from the Paymaster-General,	1,000	0	0
,, amount received on account of College fees and fines,	75	15	0
,, Balance to credit of Bursar,	20	9	0
	£1,096	4	0

CR.	£	s.	d.
By Balance to credit of Bursar from previous year,	275	3	3
,, Expenditure on the several College Departments:—			
1. Ancient and Modern Philology and Literature,	37	11	3
2. Mathematical, Physical, and Chemical Sciences,	9	2	9
3. Natural Sciences,	57	10	1
4. Engineering,	30	13	6
5. Medical Sciences,	37	12	5
6. Metaphysical, Legal, and Economical Sciences,	13	12	1
7. Printing, Stationery, Advertising, Postage, and Office Expenses,	290	11	1
8. Heating and Lighting,	182	14	10
9. Botanic Garden and Grounds,	161	12	9
	£1,096	4	0

GENERAL ABSTRACT of the ACCOUNT of the PRESIDENT or VICE-PRESIDENT, and BURSAR, of QUEEN'S COLLEGE, CORK, from 1st April, 1868, to 31st March, 1869.

DR. HEAD OF SERVICE (RECEIPTS).	£	s.	d.
To Balance on the 1st April, 1868,	1,200	10	0
,, Amount received from Paymaster of Civil Services,	8,589	5	9
,, Fees and Fines,	75	15	0
,, Balance,	25	0	0
,, Disallowed in April,	0	1	0
,, Asher and Co.,	0	2	0
,, Postage overcharge,	0	0	3
,, January, 1869,	1	0	0
	£9,891	14	0

CR. HEAD OF SERVICE (PAYMENTS).	£	s.	d.
By amount paid for Salaries,	5,741	13	6
,, ,, ,, Scholars and Prizes,	1,246	2	6
,, ,, ,, for Porters and Servants,	331	12	0
,, ,, ,, Additional Grant,	821	0	9
,, Error in Account,	3	10	0
,, Balance indebted on 31st March, 1869,	1,747	15	3
	£9,891	14	0

E. M. FITZGERALD, *Bursar.*

APPENDIX K.

Reports of Vice-President and Deans of Residences.

REPORT OF THE VICE-PRESIDENT ON DISCIPLINE, REGISTRAR'S RETURN OF PUNISHMENTS, AND REPORTS OF THE DEANS OF RESIDENCES FOR THE SEVERAL RELIGIOUS DENOMINATIONS.

RETURN to be filled up by the Vice-President and sent in to the Registrar for the official information of the President, on or before the 22nd day of February, for the Collegiate Session 1867–68.

A.—As to the state and efficiency of all the several departments of the College, to which the constant supervision of the Vice-President is directed by the statutes.

B.—As to the state of order and discipline in the College, to which the particular attention of the Vice-President is directed by the statutes.

Signed, by order of the President,

R. J. KENNY, *Registrar.*

Dr. Ryall.

REPORT OF THE VICE-PRESIDENT.

A.—The several departments of the College were in an efficient state.

B.—The discipline of the College was very good during the greater portion of the Session, but towards its close several cases of grave violation of discipline occurred, resulting in the expulsion of two students and the rustication of four others.

JOHN RYALL.

February 16, 1869.

RETURN of PUNISHMENTS during SESSION 1867–68.

Two students were rusticated for the Session for irregularity of conduct connected with the University examinations.

One student was fined 10*s.* for using insulting epithets to a College porter.

The same student was deprived of the last moiety of his scholarship and rusticated for a year, for disrespectful conduct when before the Council.

Three students were fined £5 each for having papers in the Examination Hall while under examination.

One student was expelled for having in his possession a Library book, from which the Library stamp was removed, and for the possession of which he could not account.

One student was expelled for having been convicted of an assault.

One student was rusticated for one year for having been implicated in the above assault.

REPORT of DEAN of RESIDENCES for STUDENTS of the ESTABLISHED CHURCH.

2, South Terrace, Cork,
February 25, 1869.

SIR,—I have received your letter informing me that the President desires to have my report as Dean of Residences during the past year. In reply I beg leave to say that I applied again to the Council last year to make some provision for religious instruction by allowing me the use of a lecture-room in the College, and that the Council refused my request. For nearly twelve years I have gathered the students as well as I could into a room provided by myself outside the College, and last year twenty-seven of the Established Church students attended my lectures every Saturday at four o'clock, p.m., more or less regularly. Of those gentlemen

Appendix K.

Reports of Vice-President and Deans of Residences.

who gave me the opportunity of making their acquaintance I cannot speak too highly. Their general behaviour is excellent. Of the remaining fifty or sixty Established Church students I know nothing officially. I cannot but deeply regret that the Council of the Queen's College, Cork, refuses to admit the Deans of Residences inside the College to give religious instruction.

Your faithful servant,

GEORGE WEBSTER, D.D.

Chancellor of Cork, Rector of St. Nicholas,
Dean of Residences in the Queen's College,
and Examining Chaplain to the Lord Bishop of Killaloe.

R. J. Kenny, Esq.

REPORT of DEAN of RESIDENCES for STUDENTS of the PRESBYTERIAN CHURCH.

Sir Robert Kane.

SIR,—I have the honor to report that the Presbyterian students in attendance on the Queen's College, Cork, during the Session 1867–68 were young men of excellent character, of studious habits, and that they were attentive to their religious duties.

I am, yours very truly,

WILLIAM MAGEE,
Dean of Residences.

Cork, February 23rd, 1869.

DUBLIN: Printed by ALEXANDER THOM, 87 and 88, Abbey-street,
For Her Majesty's Stationery Office.

THE REPORT

OF THE

PRESIDENT

OF

QUEEN'S COLLEGE, CORK,

FOR

THE YEAR ENDING 31ST MARCH, 1870;

WITH APPENDICES A TO L INCLUSIVE.

Presented to both Houses of Parliament by Command of Her Majesty.

108776

DUBLIN:
PRINTED BY ALEXANDER THOM, 87 & 88, ABBEY-STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.

1870.

[C.—177.] *Price 7d.*

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THE REPORT

OF THE

PRESIDENT OF QUEEN'S COLLEGE, CORK,

FOR

THE YEAR ENDING 31ST MARCH, 1870.

TO THE QUEEN'S MOST GRACIOUS MAJESTY.

MAY IT PLEASE YOUR MAJESTY,

In compliance with the provisions of the Colleges Act of Parliament, and of the Charter of the Queen's Colleges, I have the honour to submit the following Report of the Progress and Condition of this College for the year ending 31st March, 1870.

1. EXAMINATIONS FOR ENTRANCE—NUMBERS AND CLASSIFICATION OF STUDENTS.

The Entrance Examinations for the Session now current were held in October, 1869, on the several days appointed by the College Council. The regulations on the subject are given in the Prospectus of the Session, of which a copy is annexed, forming Appendix A.

After those examinations 69 new Students were entered as Matriculated Students of the First Year's Class. Further, 26 Students who had previously matriculated, but who, from not having been promoted, or from other causes, had resumed the studies of the First Year, being added to the above, make the total number of Students in that Class in the current Session 95.

In addition to the above, there presented themselves to proceed with the studies of the senior years, 133 students who had passed the Sessional Examination at the close of the previous academic year. The total number of Matriculated Students attending the College during the current Session is, therefore, 228.

Besides the above 228 Matriculated Students, there entered to attend the lectures of particular professors 24 Non-Matriculated Students, making the total number of Students in attendance at the College during the current Session to be 252.

Those Students are classified according to their collegiate standing in the following table, which also shows, for sake of comparison, the similar returns for the preceding Session.

Courses of Study in order of College standing.		Session, 1868–69.	Session, 1869–70.
Matriculated Students,	Course of First Year,	87	95
	Course of Second Year,	60	55
	Course of Third Year,	44	49
	Course of Fourth Year,	25	27
	Special courses,	–	2
Total number of Matriculated Students,		216	228
Non-Matriculated Students,		28	24
Total number of Students,		244	252

In regard to Faculties and courses of studies for University Degrees and Diplomas, the Classification of Students who attended the College during the present Session (1869-70) was as follows:—

	Matriculated.	Non-Matriculated.	Total.
In the Faculty of Arts,	51	1	52
In the Faculty of Law,	6	2	8
In the Faculty of Medicine,	154	19	173
In the Faculty of Engineering,	29	–	29
Special,	–	2	2
Total,	240	24	264

This total number exceeds that given above as the total number of Matriculated Students by 12, from so many having entered more than one Faculty to attend Lectures during the Session. There thus entered in the faculties of—

Arts and Law,	3
Arts and Medicine,	9
Total,	12

The ages of the new Students entered for the Session 1869-70 were as follows:—

15 Years,	6	20 Years,	5
16 Years,	13	21 Years and upwards,	6
17 Years,	18	Unknown,	5
18 Years,	9		
19 Years,	7	Total,	69

Ages of the Non-Matriculated Students are not noted.

Of the total number of Matriculated Students (228) on the roll for the Session 1869-70, there were 161 under 21 years, and 67 of that age or upwards.

2. College Examinations for Sessional Promotion of Students from the Session of 1868-69, and for Scholarships in the Session 1869-70.

The Examinations for sessional promotion were held at the end of the Session of 1868–69, with the results shown in the following table:—

Faculty.	Promoted.	Not promoted.	Total.
Arts,	33	14	47
Law,	6	4	10
Engineering,	13	14	27
Total,	52	32	84
Medical Students not requiring promotion,	–	–	140
			224
Attending more than one Faculty,	–	–	8
Number of Matriculated Students on the Roll in Session 1868–9,	–	–	216

Those examinations were conducted by means of printed papers, of which a selection is given in Appendix B, and prizes were awarded to those Students who were specially recommended to the College Council by the examining Professors. The names of the Students who received Sessional honors and prizes are given in Appendix C.

The Examinations for Scholarships were held in the commencement of the Session of 1869-70, as usual, under the direction of the College Council, with the following results:—

Of the 7 Senior Scholarships in Arts 4 were awarded.
The Senior Scholarship in Law was awarded.
Of the 20 Junior Scholarships in Arts 22 were awarded.
Of the 8 Scholarships in Medicine all were awarded.
Of the 3 Scholarships in Law all were awarded.
Of the 5 Scholarships in Engineering all were awarded.

The Examinations for those Scholarships were conducted principally by printed papers. The subjects of examination are described in the Prospectus in Appendix A, and the more important papers of questions are given in Appendix D.

3. Courses of Instruction.

The particulars of the Classes, the number of lectures delivered by each Professor, and the number of Students attending each class in the Session 1869-70 are given in the Table (Appendix E), and further details as to the special departments will be found in the Reports of the Professors annexed, forming the Appendix F.

4. Queen's University Examinations and Peel Exhibitions.

The Students who had completed their collegiate courses were recommended to the Senate of the Queen's University to be examined for their respective Degrees and Diplomas. The names of those Students of Queen's College, Cork, who obtained Degrees at the University Examinations in June and October, 1869, and also of those who obtained honors on those occasions, are given in Appendix G.

At the University Examination in October, 1869, 9 Students passed the First Examination in Arts, of whom 1 obtained second-class honors, 2 third-class honors, and 6 were unclassed. On the same occasion 2 Students passed the First Examination in Engineering, of whom 1 obtained third-class honors, and 1 was unclassed.

5. Competitive Examinations and Civil Service Appointments.

At Competitive Examinations held in 1869-70, the following Students of Queen's College, Cork, obtained appointments :—

Finucane, Michael, Indian Civil Service.
Anglin, Arthur, Scholarship in the University of Cambridge, St. John's College.
Good, William, Public Works, India.
Thornhill, John M., do. do.
O'Brien, Joseph, M.A., do. do. Second place.
Hastings, William, Indian Medical Service.
Lloyd, John, do. do.
Martin, Daniel, B.A., do. do.
Smith, Arthur V., do. do.
Isaac, William D., Naval Medical Service.
Sandham, Wm. S., do. do.
Sweetman, James L. do. do.
Sweetman, William, do. do. Second place.
Trousdale, Alexander, do. do.

6. Library and Museums.

The special Report of the Librarian will be found in Appendix H; and for explanations as to the condition and progress of the several Museum Departments reference may be made to the Reports of the Professors (Appendix H) in whose charge those special branches of instruction have been placed.

7. Finances of the College.

I have the honour to annex copies of the College accounts as annually furnished to the Audit Office by the Bursar of the College, and also a statement of the distribution of the Parliamentary Grant for the year closing 31st March, 1870, forming Appendix I.

8. Conduct and Discipline of the Students.—Proportion of the several Religious Denominations.

I have to report that the conduct of the Students of Queen's College, Cork, during the session 1868-69, had been very satisfactory, no breach of discipline requiring the notice of the College council having occurred within that time. The special Report of the Vice-President on discipline for that session is annexed, forming Appendix K, No. 1. As regards the portion of the current session, to 31st of March, 1870, I have to state that one case of grave infraction of discipline occurred, viz., an insulting letter written to the Vice-President by a Student whom that officer had reprimanded for inattention to class lectures. The College Council having sentenced that Student to rustication, an appeal was lodged against the sentence as excessive, which appeal was heard at the triennial Visitation, held on the 25th May, 1870.

In reference to the moral and religious conduct of the Students under 21 years of age, and resident in licensed boarding-houses, I have the honour to submit the reports of the Deans of Residences, forming Nos. 2, 3, and 4 of Appendix K.

With regard to the proportions of the several religious denominations of the students, the following tables give the numbers for the last and for the current session.

Religious Denominations.	1868-69.			1869-70.		
	Matriculated.	Non-Matriculated.	Total.	Matriculated.	Non-Matriculated.	Total.
Roman Catholic, . . .	89	8	97	83	11	94
Anglican, ...	107	18	125	122	12	134
Presbyterian, . . .	11	1	12	7	1	8
Other Denominations, .	9	1	10	16	–	16
Total, . . .	216	28	244	228	24	252

The following table gives the religious denominations of the New Students recently admitted for the session now current of 1869-70 :—

	Matriculated.	Non-Matriculated.	Total.
Roman Catholics, ...	19	8	27
Anglican, ...	41	7	48
Presbyterian, ...	1	–	1
Other denominations, . . .	8	–	8
Totals, . .	69	15	84

There is, therefore, an increase of Matriculated Students in the current session over the last of 12, and an increase of 8 on the whole body of Students.

The report of the proceedings at the triennial Visitation of the College, held on Wednesday, 25th May, 1870, is herewith submitted, forming Appendix L.

ROBERT KANE, LL.D., F.R.S.,
President of Queen's College, Cork.

Queen's College, Cork,
10*th May*, 1870.

APPENDIX.

APPENDIX A.

Appendix A.

General Regulations of College, &c.

GENERAL REGULATIONS of COLLEGE.—LIST of OFFICERS.—PROGRAMME of COURSES for MATRICULATION and SCHOLARSHIP.—HOURS of LECTURES.—SPECIAL COURSES for COMPETITIVE EXAMINATIONS and for the PUBLIC SERVICE.—UNIVERSITY EXAMINATIONS, &c.

QUEEN'S UNIVERSITY IN IRELAND—QUEEN'S COLLEGE, CORK.

Faculties of Arts, Medicine, and Law.—Session 1869–70.

President—SIR ROBERT KANE, LL.D., F.R.S., M.R.I.A.

Vice-President—JOHN RYALL, LL.D.

Professors.

The Greek Language,	JOHN RYALL, LL.D.
The Latin Language,	BUNNELL LEWIS, M.A., F.S.A.
Mathematics,	CHARLES NIVEN, B.A.
Natural Philosophy,	JOHN ENGLAND, M.A.
History and English Literature,	WILLIAM RUSHTON, M.A.
Logic and Metaphysics,	GEORGE SIDNEY READ, M.A.
Chemistry,	JOHN BLYTH, M.D.
Natural History,	JOSEPH REAY GREENE, B.A., M.D.
Geology and Mineralogy,	ROBERT HARKNESS, F.R.S.S.L. & E., F.G.S.
Modern Languages,	RAYMOND DE VERICOUR, M.A.
Jurisprudence and Political Economy,	RICHARD HORNER MILLS, M.A.
English Law,	MICHAEL BARRY, M.R.I.A.
Anatomy and Physiology,	J. HENRY CORBETT, M.D., L.R.C.S.I.
Medicine,	DENIS C. O'CONNOR, B.A., M.D.
Surgery,	WILLIAM K. TANNER, M.D., F. & L.R.C.S.I.
Materia Medica,	PURCELL O'LEARY, B. es L., M.A., M.D., F.B.S.
Midwifery,	JOSHUA R. HARVEY, B.A., M.D.
Engineering,	ALEXANDER JACK, M.A.
Celtic Languages,	OWEN CONNELLAN, Esq.

Officers.

Registrar,	ROBERT JOHN KENNY, Esq.
Bursar,	EDWARD M. FITZGERALD, Esq.
Librarian,	MATTHIAS O'KEEFFE, M.A., M.D.

The College Session, 1869–70.

The *First Term* will commence on the 19th of October, 1869, and end on the 18th of December.

The *Second Term* will commence on the 3rd of January, 1870, and end on the 9th of April.

The *Third Term* will commence on the 25th of April, 1870, and end with the Session, on the 11th of June.

Appendix A.

General Regulations of College, &c.

Subjects of the Matriculation Examinations.

For the Faculties of Arts, Medicine, and Law.

Greek:

Grammar.

Any one of the following Authors which the Candidate may select:—

Homer—Iliad, Books I. and II.
Xenophon—Anabasis, Books I. and II.
Lucian—Walker's Selections.

Latin:

Any one of the following Authors which the Candidate may select:—

Virgil—Æneid, Books I. and II.
Sallust—Conspiracy of Catiline.
Cæsar—Gallic War, Book I.

English:

Grammar—

(1.) The principles of Etymology and Orthography.
(2.) The leading Rules of Syntax.

Composition, and writing from dictation.

Outlines of Grecian History to the death of Alexander the Great.
Outlines of Roman History to the accession of Augustus.
Outlines of Ancient and Modern Geography.

Mathematics:

Arithmetic—Principles of Notation. Vulgar and Decimal Fractions. Definition of the terms, Ratio and Proportion. The Rule of Proportion, with its commercial applications, including Simple Interest.

Algebra—Explanation of the signs and meaning of an Index. Calculation of the values of Algebraical Expressions, when particular values are given to the letters which they involve.

Euclid—Book I., with the definitions and axioms.

N.B.—The Easter Recess for the Medical Faculty will commence on the Tuesday before Easter, and end on Easter Monday.

For the Department of Civil Engineering.

The outlines of Modern Geography; Grammar.

Mathematics—Arithmetic, Principles of Notation, Vulgar and Decimal Fractions, with the reasons of the different rules. Rule of Proportion, with its commercial applications; Extraction of the Square Root, both of whole numbers and decimals.

Algebra—Explanation of the signs and meaning of an Index, calculation of the value of Algebraic expressions, when particular values are given to the letters which they involve.

Euclid—Books I., II., III., IV., and VI., with the definitions of Book V.

Matriculated Students.

Persons intending to become *Matriculated* Students of the College, in any of the Faculties or Departments of Faculty, are required to pass the Matriculation Examination, whereby they are declared competent to pursue the course of study prescribed to Students in that Faculty or Department of Faculty, and, on completing this course, are entitled to become Candidates for the Degrees or Diplomas granted by the Queen's University in Ireland.

The Examination for the Matriculation *of Students in the several Faculties and Departments of Faculty, will commence at Ten o'clock, on Tuesday, the 19th of October*, 1869.

Candidates for Matriculation are required to forward their names to the Registrar of the College, and to state the Faculty or Department of Faculty for which

they propose to matriculate, at least *three days* before the commencement of Matriculation Examinations. *Appendix A.*

Each Candidate, before being admitted to the Matriculation Examination, is required to pay the Bursar of the College the *College Fees* for the year, amounting to 10*s.* for each Faculty or Department of Faculty. These fees will be returned to such Candidates as may fail in passing the Matriculation Examination. General Regulations of College, &c.

After passing the Matriculation Examination, and before receiving a Certificate thereof, or joining the several Classes, each Student is required to pay the Bursar of the College the whole of the *Class Fees* for the Session.

The Lectures in Arts and Engineering commence October 25th, and those in Medicine, November 2nd.

One moiety of the *Class Fees* for the Session is returned to Junior Scholars; but this exemption is not to extend to the Fees of any Honor Lectures attended by them out of the order of studies laid down in the Curriculum.

In order to encourage the study of French by Candidates for Matriculation, a prize of £5 will be offered for competition in that language, to such Students as, at the opening of Session 1869–70, shall have passed the Matriculation Examination for the first time.

Matriculated Students are required to wear an academic dress.

In May and June are held General Examinations in the subjects lectured upon during the Session; and a sum of One Hundred Pounds is awarded in Prizes to the most distinguished Students.

Students who have pursued part of their studies in any one of the Queen's Colleges, or in any University capable of granting Degrees in the several Faculties of Arts, Law, and Medicine, are permitted, on passing the prescribed Examinations, and producing testimonials of their College standing and conduct, to take corresponding rank in this College, and also to compete for Scholarships of the corresponding year; providing they shall not hold at the same time a Scholarship or other office of emolument in any University or College of a University.

University Prizes.

Two Prizes for English Prose Composition, and two for Geometry, have been founded in each of the Queen's Colleges, to be awarded annually at entrance—First Prize for English Prose Composition, £3 worth of Books; Second ditto, £2 worth of Books. First Prize for Geometry,* £3 worth of Books; Second ditto, £2 worth of Books.

Non-Matriculated Students.

Gentlemen who do not propose, or are not prepared, to matriculate, but who wish to avail themselves, in other respects, of the advantages offered by the College, are permitted to attend the Professors' Lectures, without passing any of the Examinations, on paying to the Bursar the regulated Class Fees, amounting generally to £2 for each course, and College Fee of 5*s.* for the Session; but they cannot become Candidates for Scholarships or Prizes, or enjoy the other privileges of Matriculated Students. They are, however, entitled to the use of the Library, on subscribing the Library Regulations, and paying a fee of 15*s.* for each Session; and the Professors are authorized to recommend to the Council to grant Certificates of Honor to the most distinguished of them in their respective Classes.

East India Civil Service.

The attention of parents and guardians is directed to the new arrangements for the East India Civil Service; according to which Writerships are open to competition at Examinations prescribed by the Board of Control. The course of Lectures in the Queen's College, Cork, are well adapted to prepare Candidates for this Examination, which includes the following branches of knowledge, their relative importance being indicated by the annexed scale of marks.

* 1st, 2nd, 3rd, 4th, and 6th Books of Euclid, with Deductions, together with the Definitions of the 5th Book.

Appendix A.

General Regulations of College, &c.

English Language and Literature:

Composition,		500
English Literature and History, including that of the Laws and Constitution,		1,000
		1,500
Language, Literature, and History of	Greece,	750
,, ,, ,,	Rome,	750
,, ,, ,,	France,	375
,, ,, ,,	Germany,	375
,, ,, ,,	Italy,	375
Mathematics, pure and mixed,		1,250
Natural Sciences—that is, Chemistry, Electricity, and Magnetism, Natural History, Geology, and Mineralogy,		500
*** No candidate will be allowed to be examined in more than three of the branches of knowledge included under this head, and the total (500) may be obtained by adequate proficiency in any three.		
Moral Science—that is, Logic, Mental and Moral Philosophy,		500
Sanscrit Language and Literature,		375
Arabic Language and Literature,		375
		7,125

Library and Museum.

The Library and Museum are open, under certain regulations, to all the Students.

Faculty of Arts.

Lectures.

The Lectures of the several Professors in this Faculty will commence on Monday, the 25th of October, 1869, except those on the "English Language" and on "Logic," which will not be delivered until the commencement of the Second Term.

Scholarships.

The Examinations for Scholarships will commence on Thursday, the 21st of October.* The College Council are empowered to confer, at these Examinations, Eight Senior Scholarships of the value of £40 each, and Forty-six Junior Scholarships, viz.:—Fifteen in Literature, and Fifteen in Science, of the value of £24 each; Eight in Medicine, value £25 each; Three in Law, and Five in Civil Engineering, of the value of £20 each—and if competent Candidates present themselves, these Scholarships will be awarded to the most deserving. The Scholarships are tenable for one year only, except the Second Year's Scholarships in Arts, which are tenable for two years, on condition that the Scholar shall pass with Honors the "First University Examination," and shall attend, during the third Session, at least two of the Courses of Lectures prescribed by the University for attendance during that Session, as a qualification for the Degree of B.A., and shall pass the Sessional Examinations in these subjects; but the Scholars of each year are, at its expiration, eligible to become Candidates for the Scholarships of the succeeding year. A Scholarship, however, of the same year in the same Faculty, cannot be held twice by the same Student.

The Scholarships of the first year are open to all Students of the respective Faculties who have passed the Matriculation Examination. Those of the second and fourth years in Arts and those of second, third, and fourth years in Medi-

* See Programme of Scholarship Examinations, page 16.

cine and Law, and of the second and third in Engineering, are open to all Students who have passed the Examinations, and attended the Lectures prescribed in the preceding part of their Course of Study.

If any Student be placed, at the Examination for Junior Literary and Science Scholarships, first on both the lists of Candidates, he will be entitled to a Scholarship of each Division; but in no other case will the same Student be permitted to hold two Scholarships.

No Student is entitled to become a Candidate for a Scholarship, or Exhibition, unless he shall have paid, on or before the day previous to the Examination, the COLLEGE AND CLASS *Fees for the current Session, and procured a Certificate to that effect from the Bursar.**

The Scholarship and Exhibition endowments are paid by Quarterly Instalments, and their tenure is dependent on the performance (so far as required by the Council) of the duties prescribed by the Statutes. These duties are, to take charge of the Class-Rolls, to Register the attendance of the Students, to assist the Professors, &c.

If the Scholar or Exhibitioner be not obedient to the orders of the Council, be removed from the College, or, by non-attendance on Lectures, fail to keep the terms required for promotion, he forfeits his Scholarship or Exhibition.

The Scholar in the Faculty of Medicine must attend, during the year of his appointment, the classes recommended for his year of study in the order of the following Curriculum:—

FIRST YEAR.	THIRD YEAR.
Anatomy and Physiology.	Surgery.
Chemistry.	Midwifery.
French or German.	Practical Anatomy.
Natural Philosophy.	
Zoology and Botany.	
SECOND YEAR.	**FOURTH YEAR.**
Anatomy and Physiology.	Practice of Medicine.
Materia Medica.	Medical Jurisprudence.
Practical Anatomy.	
Practical Chemistry.	

JUNIOR SCHOLARSHIPS.

Subjects of Examination for Literary Scholarships of the First Year.

The Greek Language:

Homer—The Iliad, Books I., II., III., IV., V., and VI.
Euripides—Phœnissæ.
Herodotus—The Second Book.
Xenophon—The Anabasis, Books I., II., III.
Lucian—Walker's Selections.
Greek Prose—Re-translation of short sentences from English into Greek.

The Latin Language:

Virgil—First six Books of the Æneid, the Georgics.
Horace—First two Books of the Odes, the Satires, and the Epistles, Books I., II.
Cicero—De Senectute, De Amicitiâ.
Sallust—Conspiracy of Catiline, and Jugurthine War.
Cæsar—The Gallic War, Books V., VI.
Latin Prose—Re-translations from English into Latin, of portions of Cicero.
N.B.—The Examination in Greek and Latin will be conducted partly *vivâ voce*, and partly by printed questions.

The English Language:

Original Essays on subjects proposed by the Examiner. The Principles of English Grammar. The Laws of Etymology and Orthography. Craik's Outlines of the History of the English Language.

History and Geography:

Grecian History to the Death of Alexander the Great.
Roman History to the Accession of Augustus.
Outlines of Ancient and Modern Geography.

* This rule applies only to such candidates as have previously attended any course of instruction in any University capable of granting Degrees.

Appendix A.

General Regulations of College, &c.

Subjects of Examination for Literary Scholarships of the Second and Third Years.

The Greek Language:
Homer—Iliad, Books XI. to XIV. inclusive.
Sophocles—Œdipus Coloneus.
Thucydides—Book I., Chapters 1 to 60 inclusive.
Prose composition.

The Latin Language:

Virgil—Eclogues and Æneid.
Horace.
Terence—Heauton Timorumenos.
Cicero—Tusculan Disputations.
,, De Oratore.
Juvenal—Satires, I., III., VIII., X., XIII., XIV.
Livy—Book IV.
Tacitus—Histories, Book I.

Composition in prose and verse.

The English Language:
Craik's Outlines of the History of the English Language.
History of English Literature. Text-book, Chambers' Cyclopædia of English Literature, Vol. I., pp. 85–145.
Shakespeare's Julius Cæsar.
,, King John.

The French Language:
Molière—L'Avare; Le Misanthrope.
Lafontaine—Fables.
Histoire de la Littérature Française, par Demogeot.
Translation from English into French.

Subjects of Examination for Science Scholarships of the First Year.

Arithmetic:
Mensuration of rectilineal figures and of the circle.

Algebra:
The Solution of Simple and Quadratic Equations with one or more unknown quantities. Easy questions in the application of Algebra to Geometry. Arithmetical and Geometrical Progressions. The nature of Logarithms.

Euclid:
Books I., II., III., and IV., with deductions.

Trigonometry:
Definitions of the Sine, Tangent, &c., of an angle. The easier analytical formulæ. The Solution of Plane Triangles, with demonstrations. Nature and Use of the Tables.

Subjects of Examination for Science Scholarships of the Second and Third Years.

The Higher Arithmetic, with Mensuration:
Algebra:
The Solution of Equations with one or more unknown quantities. Elimination. Theory and use of Logarithms. Theory of Equations. Binomial and Exponential Theorems. Compound Interest and Annuities.

Geometry:
Euclid, Books I., II., III., IV., VI., with deductions. Analytical Geometry.

Trigonometry:
The Solution of Plane Triangles, with demonstrations of the formulæ. Theorems relating to single arcs. Theorems relating to the sums and differences of arcs. Application to heights and distances.

Subjects of Examination for Engineering Scholarships of the First Year.

Arithmetic:
Mensuration:
Algebra:
Euclid:
Trigonometry:
} As for Science Scholarships of the First Year.

Subjects of Examination for Engineering Scholarships of the Second Year.

Mathematics:

The same as for Science Scholarships of the Second Year, except that Spherical Trigonometry will be substituted for Analytical Geometry.

French:

Demogeot—Histoire de la Littérature Française.
Translation from English into French.

Chemistry:

Laws of Combination and Affinity—Preparation and Properties of the Chief Organic Substances—Metallurgic Operations—Mortars and Cements.

Geometrical Drawing:

Descriptive Geometry—Orthographic Projection—Isometric Projection—Perspective—Geometry of Oblique Bridge.

Subjects of Examination for Engineering Scholarship of the Third Year.

Mathematics:

Algebra—Theory of Equations and Methods of Approximation. Elimination. Summation of Series. Binomial and Exponential Theorems. Scales of Notation, &c.

Trigonometry—Plane and Spherical, with Astronomical applications.

Analytical Geometry, and Geometrical Conic Sections.

Differential Calculus—involving demonstrations of the rules for differentiating Algebraic, Circular, and Exponential Functions, founded upon a clear statement of the nature of Limits and Definition of a Differential coefficient. Taylor's and Maclaurin's Theorems. Maxima and Minima. Criteria of the same, with proofs, Equation of Tangent, Normal, Evolute, &c.

Integral Calculus, including more particularly Rational Fractions, Binomial Differentials, Areas of Curves, Rectification of Curves, Cubature of Solids of Revolution.

Natural Philosophy:

Newth's Mechanics.
Ganòt—Traite de Physique—Books VI., VII., VIII., IX.

Geology and Mineralogy:

Civil Engineering:

Instruments used by the Civil Engineer. Their Adjustments and use. Surveying. Levelling.

Senior Scholarships.

Seven Senior Scholarships are appropriated to the Faculty of Arts, for proficiency in Special Departments of Study, and will be conferred, by examination, on the most deserving of the Graduates of the Queen's University, in the Faculty of Arts, of less than two years' standing.

One in Ancient Languages, Literature, and History of Ancient Greece and Rome.

One to Modern Languages, Literature, and History, viz., English Language, Literature, and Composition; European and English History; the French Language, with German or Italian.

One to Mental and Social Science, viz., Logic, Metaphysics, and Political Economy.

One to Mathematics, viz., Pure Mathematics.

One to Natural Philosophy, viz., Experimental Physics, and Mixed Mathematics.

One to Chemistry, viz., Theoretical and Practical Chemistry.

One to Natural History, viz., Zoology and Botany, Geology, and Physical Geography.

*** For Senior Scholarship in Law, see page 26.

Appendix A.

General Regulations of College, &c.

SUBJECTS OF EXAMINATION

For the Senior Scholarships in the Greek and Latin Languages, and Ancient History.

The Greek Language:

Æschines—Contra Ctesiphontem.
Together with the subjects for the B.A. Honor Examination at the University.
Composition in Attic Prose and Iambic Verse.
Greek Literature and History.

The Latin Language:

Virgil.
Horace.
Lucretius, Books I. II.
Ovid—Fasti, Book I.
Persius.
Terence—Andria and Heauton Timorumenos.
Plautus—Capteivei and Pseudolus.
Cicero—De Oratore.
,, Tusculan Disputations.
,, Ad Atticum, Books I., II.
,, Actiones Verrinæ.
Livy—Books IV. and XXII.
Tacitus—The Annals, Books I. to IV., inclusive.

Composition in Prose and Verse.

For Senior Scholarships in Modern Languages and History.

The French Language:

Lavallée—Histoire des Français.
Histoire de la Littérature Française, par Demogeot ou Nisard.

The German Language:

National-Literatur, von A. F. Vilmar.
Schiller's Maria Stuart.
Goethe's Ephigenie.

Translation from English into one of the above Languages.

English:

Language, Literature, and Composition.
History—Hallam's Middle Ages.
Chap. II., Part 1, The Feudal System.
Chap. VIII., Part 1, The Anglo-Saxon Constitution.
Chap. VIII., Part 2, The Anglo-Norman Constitution.
Chap. VIII., Part 3, The English Constitution.

The Italian Language:

Tasso—Gerusalemme Liberata—first five Cantos.
Dante's Inferno—Italian Literature, published by Messrs. Chambers.
Translation from English into French, German, or Italian.

For the Senior Scholarship in Mathematics.

The subjects of previous Examinations (for which see page 14), with the following additions:—

Analytical Geometry of Three Dimensions.
Differential Equations.

For the Senior Scholarship in Natural Philosophy.

Duhamel—Mécanique.
Brinkley—Elements of Astronomy, including the Appendix.
Parkinson's Optics.

For the Senior Scholarship in Mental and Social Sciences.

The subjects discussed in the Lectures of the Professors, with the following additions:—

Metaphysics and Logic:

Sir William Hamilton's Philosophical Essays and Notes on Reid.
Mill—System of Logic, Book III. to the end of Volume I.

Political Economy:

Principles of Political Economy, by John Stuart Mill.
Taxation and Funding, by M'Culloch—third edition, 1863.

The value attached to the subjects will be in the following proportions, viz.:—

Metaphysics and Logic,	60
Political Economy,	40

For the Senior Scholarship in Chemistry.

Chemical Physics (in Miller's Chemistry).

Inorganic Chemistry:

General principles of Chemical Philosophy. Crystallography. Chemistry of the Metals. Constitution of Salts. Metallurgy.

Organic Chemistry:

Ultimate analysis of Organic Bodies. Empirical and Rational formulæ. Determination of the density of Vapours. Law of Substitution. Homologous Series. Chemical Types. Gerhardt's Views. Preparation and Properties of the Alcohol Series and their Derivatives. Cyanogen, its Compounds and Derivatives. Organic Bases of Artificial Origin.

Practical Chemistry:

The Analysis of Mixtures, containing two or more Acids and Bases.

For the Senior Scholarship in Natural Science.

The Lectures of the Professors.
Huxley—Elements of Comparative Anatomy.
Mill's Logic, Book IV.
Lyell's Elements and Principles.

1. Course for the Degree of Bachelor in Arts.*

Candidates for the Degree of Bachelor in Arts are required—

1. To have been admitted Matriculated Students of the Queen's University in the Faculty of Arts.
2. To have subsequently studied in one of the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examinations herein prescribed.

The Course for the Degree of Bachelor in Arts shall extend over three Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

English (One Term).
Greek.
Latin.
A Modern Continental Language.
Mathematics (First Course).

SECOND SESSION.

Logic (One Term).
Natural Philosophy.

Along with any two of the following:—

Greek (Second Course).
Latin (Second Course).
Modern Continental Languages (Second Course).
Mathematics (Second Course).

THIRD SESSION.

English Language and Literature.
Metaphysics, or History, or Political Economy (Two Terms).
Chemistry.
Zoology, or Botany.

Attendance on these Courses shall, in all cases, be understood to include passing such examinations as may be appointed by the College Council, and the catechetical parts of the Courses of Lectures.

Candidates for the Degree of Bachelor in Arts shall reside at their respective Colleges during at least the first two terms of each Session, but may be exempted from residence during the third term by a special grace of the College Council.

Third year's Students may substitute attendance on one or on two Courses of Honor Lectures, for a like number of the Courses above set down for study in the third Session.

* His Royal Highness the Commander-in-Chief has approved of Graduates of the Queen's University being in future exempted from the usual Examination for direct Commissions; and also of the First University Examination being accepted in lieu of that for the Royal Military College, Sandhurst.

Appendix A.

General Regulations of College, &c.

Candidates for the Degree of Bachelor in Arts shall pass two University Examinations—a Preliminary and a Degree Examination.

The Course for the Preliminary Examination shall include Greek, Latin, a Modern Continental Language, and Mathematical Science. Students who have completed their second Session must pass this Examination before rising to the third year, unless prevented by illness or other inevitable accident, in which case the Senate may admit them to a Supplementary Examination.

Candidates who have completed the Undergraduate Course, may offer themselves at the Degree Examination for graduation either with Honors or without Honors.

If they seek to graduate with Honors, they may select for their Examination any one of the following groups :—

Greek and Latin.
Modern Continental Languages.
Mathematical Science.
Experimental Science.
Natural Science.

Or any three of the following :—

English Language and Literature.
Metaphysics.
History.
Political Economy.
Logic.

Candidates who seek the Degree without Honors, may select for their Examination any group of the subjects from the following list, provided the sum of the numbers attached in this list to the selected subjects be at least four :—

English Language and Literature,	2	Latin,	1
Mathematical Science,	2	Each Modern Continental Language,	1
Experimental Physics,	2	Logic,	1
Chemistry,	2	Metaphysics,	1
Zoology,	1	History,	1
Botany,	1	Political Economy,	1
Greek,	1		

English Composition will form a part of all University Examinations.

2. Course for the Degree of Master in Arts.

Bachelors in Arts of one year's standing, may offer themselves for Examination for the Degree of Master in Arts, and may select for their Examination any one of the following groups :—

Greek and Latin.
Modern Continental Languages.
Mathematical Science.
Experimental Science.
Natural Science.

Or any three of the following :—

English Language and Literature.
Metaphysics.
History.
Political Economy.
Logic.

This Ordinance supersedes former Ordinances prescribing the curriculum for the Degree of Master in Arts.

3. Course for the Diploma of Licentiate in Arts.

A Diploma conferring the title of Licentiate in Arts of the Queen's University in Ireland, shall be granted to Candidates who comply with the following regulations :—

Candidates for this Diploma are required—

1. To have matriculated in the Queen's University.
2. To have pursued in one of the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examination herein prescribed.

The Course for the Diploma of Licentiate in Arts shall extend over two Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

Two Languages, of which one may be English.
Mathematics.
Another Course on any subject in the annexed list.

SECOND SESSION.

Greek, Latin, or a Modern Continental Language.
Logic (One Term).
Natural Philosophy.
And two other Courses on subjects in the annexed list.

If any of the Courses, except that on Logic, extend over one Term only, some other Course from the annexed list must be attended as a supplement to it, but not necessarily in the same Session.

Credit will not be given for attending the same Course of Lectures a second time.

Attendance on the Courses shall, in all cases, be understood to include passing such Examinations as the College Council shall appoint, and the catechetical parts of the Courses of Lectures.

Candidates for the Diploma of Licentiate in Arts shall reside at their respective Colleges during at least the first two terms of each Session.

After having completed the above curriculum, Candidates for the Diploma shall pass a University Examination in Greek, Latin, or a Modern Continental Language; in Mathematical Science; and in two other subjects selected from the annexed list, viz.:—

The Mathematical Sciences.
The Experimental Sciences.
The Natural Sciences.
Geometrical Drawing.
Mensuration, Levelling, and Mapping.
Anatomy and Physiology.
English Language and Literature.
The Modern Continental Languages.
Greek.
Latin.
Logic.
Metaphysics.
History.
Political Economy.

English Composition will form a part of all University Examinations.

Licentiates in Arts who may desire to proceed to the Degree of Bachelor in Arts, may enter directly on the second Session in the Course for this Degree, provided they attend in it, instead of the usual curriculum, all the Courses prescribed for the first two years which they shall not have already attended in the curriculum for the Diploma of Licentiate.*

University Prizes.

University Exhibitions in the Faculty of Arts.

Three Exhibitions of £20 a year for three years, three Exhibitions of £15 a year for three years, and two Exhibitions of £10 a year for three years, will be competed for annually in the Faculty of Arts. The three £20 Exhibitions will be awarded to the Candidates who stand foremost in order of merit from each College, at the first University Examination in Arts; and the three £15 Exhibitions to the Candidates who stand second in order of merit from each College: provided that their names appear in the First Class of the Division List at that Examination. Of the two £10 Exhibitions, one will be awarded to the best answerer in Mathematical Science, and the other to the best answerer

* Note.—Degrees in Arts, conferred by the Queen's University in Ireland, are recognised by the University of Durham, by St. Bee's College, Whitehaven, and by St. Aidan's College, Birkenhead, in the case of Theological Students preparing for Holy Orders in the Established Church.

Appendix A.

General Regulations of College, &c.

in the Ancient Classics, at the first University Examination. The £10 Exhibitions are open to the competition of Candidates from all the Colleges, and may be held along with one of the larger Exhibitions.

Each Candidate will be deemed a Student of that College in which he shall have attended the Lectures of the second Session; and no Student will be admitted to the competition who shall have allowed more than one academic year to intervene between the time that he entered upon the studies of the second Session and the time of competition.

The first instalment of each Exhibition will be paid at the time of competition; the second when the Exhibitioner takes the Degree of B.A. in the Queen's University, provided he graduate with honors, and within two academic years; and the third when he takes the Degree of M.A. in the Queen's University, provided he obtain it within three academic years from the time of competition.

University Prizes in Composition, open to the Competition of Graduates and Undergraduates.

Two Prizes for English Prose Composition, one of £10 worth of Books, and the other of £5 worth of Books, have been founded, and are open to the competition of all members of the University who shall not have been graduates for more than three years at the time of competition, and who shall not have already twice obtained one or other of these Prizes.

University Prizes in Composition, open to the Competition of all Undergraduates.

Two Prizes in Composition, one for English Prose, the other for Greek or Latin Prose, and each consisting of £5 worth of Books, have been founded, and are open to the competition of all undergraduates, provided that neither the English nor the Classical Prize be awarded oftener than twice to any Student.

DIPLOMA IN ENGINEERING.

Each Candidate for the Diploma in Civil Engineering is required—

1. To have been admitted a Matriculated Student of the Queen's University in the Department of Civil Engineering.
2. To have studied in the Colleges of the Queen's University the Course herein prescribed.
3. To have passed the University Examinations herein prescribed.

The Course for the Diploma in Civil Engineering shall usually extend over Three Sessions, and shall comprise attendance on the following curriculum:—

FIRST SESSION.

Mathematics (First Course).
Chemistry.
Modern Languages.
Geometrical Drawing.
Office Work.
Mineralogy, Geology, and Physical Geography.

SECOND SESSION.

Mathematics (Second Course).
Experimental Physics.
Civil Engineering.
Office Work.
Field Work.

THIRD SESSION.

Natural Philosophy, applied.
Mathematical Physics.
Civil and Mechanical Engineering.
Office Work.
Field Work.
Engineering Excursions.

Attendance on these Courses shall in all cases be understood to include passing such Examinations as may be appointed by the College Council, as well as the catechetical parts of the Courses of the Lecture.

Engineering Students shall reside at their respective Colleges during at least the first two Terms of each Session, and can be exempted from residence during the third Term also, only by a special grace of the College Council.

The study of the Engineering Curriculum may be extended over more than three Sessions, on the recommendation of the College Council, and under such regulations as the Council shall impose. Some relaxation of the order in which the subjects shall be studied will also be admitted, on the recommendation of the Council.

Candidates will, on the special recommendation of the College Council, be admitted to the Diploma after two years' residence instead of three, if their previous acquaintance with a sufficient group of the subjects above set down for study in the First and Second Session is deemed by the Council satisfactory. In such cases the Certificate of the Council will be accepted in lieu of attendances upon these Courses, but will not exempt Candidates from the University Examinations in them.

In order to obtain this Certificate, Students must have attended previously at least one Session in Arts, or one year in an Engineer's office. On making application to the Council, such Students will be allowed to present themselves, at the time of Matriculation, for examination in the subjects of any four of the eight Courses of Lectures of the first two years. On passing this Examination, they will be allowed to take rank at once as Students of the second year, and will then be required to attend those other four Courses of Lectures only, in the subjects of which they have not passed; but they will not be eligible for the Scholarship of that year.

The application to be admitted to this Examination must be lodged with the Registrar before the first day of the Session, and must state what are the four subjects in which the Students propose to offer themselves for Examination, and must be accompanied by a Certificate of the required attendance of one or more years in Arts or an Engineer's Office.

On passing the Sessional Examinations in the subjects of these four Courses of Lectures which they shall have attended as Students of the second year, they will be promoted to the rank of Students of the third year; and, on completing the regular Course of that year, will be furnished with the Certificate required by the Senate of the University.

The University Examinations shall extend to all the subjects of the above Curriculum. French will, in all cases, be required.

Candidates must present themselves before the close of their Collegiate Course for Examination in the following subjects, viz.:—Mathematics (*First Course*); Experimental Physics; Modern Languages; Geometrical Drawing (including Orthographic projection, Isometric projection, Descriptive Geometry, and Linear Perspective); Mathematics (*Second Course*); Mensuration, Levelling, and Mapping.

The final Examination shall extend to all the subjects of the Engineering Course, in which the Candidate shall not have previously passed. English Composition will form a part of each University Examination.

This Ordinance shall take effect from the first day of January, 1860; Students who shall have entered the Engineering Schools of the Colleges of Queen's University previously, may proceed either under the present Ordinance, or under that hitherto in force.

Exhibitions in the School of Engineering.

Two Exhibitions, one of £20 a year for two years, and the other of £15 a year for two years, will be competed for annually in the School of Engineering. These Exhibitions will be awarded at the first University Examination in Engineering: the £20 Exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated, and the £15 Exhibition to the Candidate who is first in order of merit of the competitors from the other two Colleges: provided that their names appear in the First Class of the Division List at that Examination.

Each Candidate will be deemed a Student of that College in which he shall have attended the Lectures of the second Session; and no Student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

Appendix A. — General Regulations of College, &c.

The first instalment of each Exhibition will be paid at the time of competition; the other when the Exhibitioner takes the Diploma in Engineering of the Queen's University, provided that he take honors with it, and obtain it within two academic years from the time of competition.

Faculty of Medicine.

Lectures, &c.

The Medical Session will be opened on Tuesday, 2nd of November, 1869, and the Courses of lectures will commence as under:—

Anatomy and Physiology—Tuesday, 2nd November, at One o'clock, to be continued daily, except on Saturdays, at the same hour.

Practice of Medicine—Wednesday, 3rd November, at Three o'clock, to be continued on Mondays, Wednesdays, and Fridays, at the same hour.

Practice of Surgery—Tuesday, 2nd November, at Four o'clock, to be continued on Tuesdays and Thursdays, at Four o'clock, and Saturdays, at One o'clock.

Materia Medica—Tuesday, 2nd November, at Three o'clock, to be continued on Tuesdays and Thursdays, at Three o'clock; and on Saturdays, at Twelve o'clock.

Medical Jurisprudence—Tuesday, 2nd November, at Twelve o'clock, to be continued on Tuesdays and Thursdays, at the same hour, and on Fridays at One o'clock.

Midwifery—Wednesday, 3rd November, at Four o'clock, to be continued on Mondays, Wednesdays, and Fridays, at the same hour.

The Course of Practical Anatomy will be conducted by the Professor of Anatomy and Physiology, assisted by Dr. Shinkwin and Dr. H. M. Jones, Demonstrators.

The Anatomical Demonstrations will commence on 3rd of November, and be continued daily at Twelve o'clock, except Saturdays.

Chemistry—Monday, Wednesday, and Friday, at Two o'clock.

Practical Chemistry—Monday, Tuesday, Wednesday, Thursday, and Friday.

Zoology and Botany—Monday, Wednesday, and Friday.

Natural Philosophy—Tuesdays and Thursdays.

Modern Languages—Monday, Wednesday, and Friday.

Subjects of Examination for Medical Scholarships of the First Year.

The Scholarships of the First year in the Faculty of Medicine will be awarded thus:—One to the Candidate who shall have most distinguished himself at the Examination in the course prescribed for Science Scholarships of the First year in Arts, and one to the Candidate who shall have most distinguished himself at the Examination in the course prescribed for Literary Scholarships of the First year in Arts. Candidates for these Scholarships shall have previously declared themselves, and have matriculated as Medical Students. It is left to their option for which of them they will compete.

Subjects of Examination for Medical Scholarships of the Second Year.

Anatomy and Physiology.	General Physics.
Chemistry.	Zoology and Botany.

The French Language.

Subjects of Examination for Medical Scholarships of the Third Year.

Anatomy and Physiology.	Materia Medica.
Practical Anatomy.	Practical Chemistry.

Subjects of Examination for Medical Scholarships of the Fourth Year.

Anatomy and Physiology.	Pathology and Morbid Anatomy.
Practical Anatomy.	Surgery.
Therapeutics.	Midwifery.

Note.—The 17th of November will be the last day for entering for the Six Months' Courses of Lectures in the above Curriculum. All the Lectures are recognised by the Queen's University in Ireland, by the Universities of London, Glasgow, Aberdeen, and St. Andrew's; the Colleges of Surgeons of Dublin, Edinburgh, and London; by the Apothecaries' Companies, by the Army, Navy, and East India Medical Boards, &c., &c.

Degrees of M.D. and M.Ch.*

Each Candidate for the Degree of Doctor in Medicine or Master in Surgery is required—

1st.—To have passed in one of the Colleges of the Queen's University the Entrance Examination in Arts, and to have been admitted a Matriculated Student of the University.

2nd.—To have attended in one of the Queen's Colleges, Lectures on one Modern Continental Language for six months, and Lectures on Natural Philosophy for six months.

3rd.—To have also attended, in some one of the Queen's Colleges, at least two of the courses of Lectures marked with an asterisk. For the remainder of the courses, authenticated certificates will be received from the Professors or Lecturers in Universities, Colleges, or Schools, recognised by the Senate of the Queen's University in Ireland.

4th.—To pass two University Examinations—the First University Examination, and the Degree Examination.

The Curriculum shall extend over at least four years, and shall be divided into periods of at least two years each.

Candidates are recommended to pass the Matriculation Examination, prior to entering on the second period.

It is recommended that the first period shall comprise attendance on the following Courses of Medical Lectures:—

* Chemistry.
* Botany, with Herborizations for practical study, and Zoology.
* Anatomy and Physiology.
* Practical Anatomy.
* Materia Medica and Pharmacy.

And that the second period shall comprise attendance on the following Courses of Medical Lectures:—

Anatomy and Physiology (Second Course).
Practical Anatomy (Second Course).
* Theory and Practice of Surgery.
* Midwifery.
* Theory and Practice of Medicine.
* Medical Jurisprudence.

In addition to the above Courses of Lectures, Candidates shall have attended during either the first or second period—

A Modern Continental Language (in one of the Colleges of the University).
Experimental Physics (in one of the Colleges of the University).

Also, during the first period—

Practical Chemistry (in a recognised Laboratory).
Medico-Chirurgical Hospital (recognised by the Senate) containing at least sixty beds, together with the Clinical Lectures therein delivered, at least Two each Week—a Winter Session of Six Months.

And during the second period—

Practical Midwifery, at a recognised Midwifery Hospital, with the Clinical Lectures therein delivered—for a period of Three Months, in an Hospital containing not less than Thirty beds; or six Months, in an Hospital containing not less than Fifteen beds.

Medico-Chirurgical Hospital (recognised by the Senate) containing at least sixty beds, together with the Clinical Lectures therein delivered—Eighteen Months; including either three Winter Sessions of Six Months each, or two Winter Sessions of Six Months each, and two Summer Sessions of Three Months each.

Medical Examinations are held in June, and in September and October.

The June Examinations are Pass Examinations, and commence on the Tuesday following the Second Saturday in June.

* The regulations under which degrees in Surgery will be conferred on Candidates who graduated in Medicine before the year 1865, may be learned on application to the Secretary of the Queen's University.

Appendix A.

General Regulations of College, &c.

The Honor Examinations commence on the last Tuesday in September, and are followed by Pass Examinations.

Each Candidate for Examination in June must forward to the Secretary, on or before the first of June, notice of his intention to offer himself as a Candidate, along with his Certificates; and each Candidate for Examination in September or October must forward similar notice, along with his certificates.

Exhibitions in the Faculty of Medicine.

Two exhibitions, one consisting of two instalments of £20 each, and the other of two instalments of £15 each, will be competed for annually in the Faculty of Medicine. These exhibitions will be awarded for proficiency in the non-professional part of the first University Examination in Medicine: the £20 exhibition to the best answerer absolutely, in whichever of the Colleges he may have been educated; and the £15 exhibition to the candidate who is first in order of merit, of the competitors from the other two colleges; provided that their names appear in the First Class of the Division List at that examination.

Each Candidate will be deemed a student of that College in which he shall have attended the Lectures of the second session; and no student will be admitted to the competition who shall have allowed more than a year to intervene between the time that he entered on the studies of the second year and the time of competition.

The exhibitions in Medicine will be paid in two equal instalments: one at the time of competition; the other when the exhibitioner takes the Degree of M.D. in the Queen's University, provided that he graduate with honors, and within three academic years from the time of competition.

Prize in Composition, limited to the Competition of Undergraduates in Medicine.

A prize of £5 worth of books has been founded, for a thesis on a subject to be prescribed, and is limited to the competition of the Undergraduates in Medicine who shall not have already twice received the prize.

The subjects on which the competitors for composition prizes are to write, will be announced on or before the first of June in each year; the compositions, with fictitious signatures, are to be sent in to the Secretary of the University, on or before the first of the following September, and the successful competitors will be declared at the next Public Meeting of the University.

Hospital Attendance.—Clinical Lectures on Medicine and Surgery are delivered at the North and South Infirmaries, by the Physicians and Surgeons of those Instituitons.

	£	*s.*	*d.*
Fee for twelve months, ...	8	8	0
Fee for six months, ...	5	5	0
Practical Pharmacy at the same Infirmaries:			
Fee for three months, ...	3	3	0
Clinical Midwifery at the Lying-in Hospital, with Practical Attendance upon Thirty Midwifery cases:			
Fee for six months, ...	3	3	0

Further information may be had from the Medical Officers at the Infirmaries.

Faculty of Law.

Lectures.

The complete Course for each Class consists of Twenty-four Lectures, by the Professor of English Law, in each Collegiate Session; and of Twenty-four Lectures in each course of the first two years. The Lectures are delivered in the months of December, February, and March.*

* The following Rules were adopted by the Honorable Society of King's Inns, in Hilary Term, 1852, with reference to attendance on Lectures, as a condition precedent to being called to the Bar, viz.:—

V.—Every Student admitted into the Society after the first day of Trinity Term, One Thousand Eight Hundred and Fifty, if a Graduate of the University of

Law Scholarships.

Examination by the Professor of Jurisprudence.

First Year:

Reddie's Inquiries in the Science of Law.
Adam Smith's Wealth of Nations—Book III.
Hallam's Middle Ages—Chap. 8.

Examination by the Professor of English Law.

Williams—Principles of the Law of Real Property.

Second Year:—By Professor of Jurisprudence.

The Lectures of the Professor in the First Year (see notes).
Sandar's Institutes of Justinian—Introduction.
The Chapters on Social Science in J. S Mill's Logic—Book VI., Chap. 6, to end of the Book.

By Professor of English Law.

The Lectures of the Professor for the preceding years.
Smith—Manual of Equity Jurisprudence.
Williams—Principles of the Law of Personal Property.
Smith—On Contracts.

Third Year:—By Professor of Jurisprudence.

Ancient Law, by H. S. Maine (omitting latter part of chap. 9, from p. 340).
Sandar's Justinian, and the Lectures of the Professor, in the first and second years.

Dublin, Oxford, Cambridge, Durham, or London, or the Queen's University in Ireland, shall, as a condition precedent to being called to the Bar, produce Certificates of his having attended two complete Courses *at least* of Lectures, viz.:—one complete Course of Lectures of any two, at his option, of the four Law Professors—namely, the Law Professors of the University of Dublin, and those of the King's Inns, and *at least* five-sixths of the Lectures of each Session or University Term; or if a Graduate in Arts of the Queen's University in Ireland, shall have the option of producing Certificates of having attended two complete Courses, at least, of Lectures of each of the two Law Professors of any College of the Queen's University, comprising not less than thirty-six Lectures, and at least five-sixths of the Lectures of each Course, and of having passed the Examinations, in the College to which he belongs, on the subjects of the aforesaid two Courses of Lectures, provided that the curriculum prescribed by the said two Courses of Lectures shall embrace all that is contained in the Course now prescribed by the Professors of the King's Inns, or as the same may be from time to time varied by any rules of the Benchers.

VI.—Every Student admitted into the Society after the above date (if not a Graduate of one of the said Universities), shall, as a condition precedent to being called to the Bar, produce Certificates of his having attended four Courses of Lectures, viz.:—One Course of the Lectures of each of the said four Professors, and, *at least*, five-sixths of the Lectures of each Session, or University Term, in such manner, however, that every such Student shall be engaged not less than three years in the study of the Law in Ireland, exclusive of the two years necessary for keeping Terms in England; in every one of which three years, one complete Course of Lectures must be kept; any Student who shall produce Certificates of his having attended during three years the Courses of Lectures delivered by the Professors of English Law and of Jurisprudence, in one of the Colleges of the Queen's University, and of his having passed the General Examinations in such College on the subjects so Lectured on, shall be deemed entitled to such and the same privileges, in respect to his being called to the Bar, as if he had actually attended One Course of the Lectures of each of the two Law Professors of the University of Dublin, and had been engaged for two years in such attendance; but this rule and the preceding one are not intended to affect the number of Terms' Commons required by the present Rules of the Society, to be kept by Students of the King's Inns, prior to being called to the Bar.

VII.—If from illness, or other sufficient cause, any Student should be prevented from completing any Course of Lectures necessary towards being called to the Bar, the Legal Education Committee have power to direct what further attendance, if any, shall be sufficient in such case.—*Rules as to Legal Education, No.* 3.

Appendix A.

General Regulations of College, &c.

NOTE.—The following works may be referred to in connexion with the principal subjects discussed in the Lectures on Jurisprudence:—

Dumont's Bentham (translation by Hildreth), "Principles of Legislation," and 1st and 2nd parts of the "Principles of the Civil Code."
Stephens' "Criminal Law."
Mill's "Political Economy"—Chapters on Property, 1 and 2, Book II., and on the Function of Government, 8, 9, 10, 11, Book V.
Mill's "Representative Government."

By Professor of English Law.

The Lectures of the Professor for the preceding years.
Smith—Leading cases on branches of the Law.
Storey—Equity Jurisprudence.

The Senior Law Scholarship will be awarded, by Examination, to the most distinguished Student who shall have proceeded in the Course of Arts to the Degree of A.B., and who shall have completed the Course of Legal Study prescribed to Candidates for the Degree of LL.B. in the Queen's University in Ireland.

Examination for the Senior Scholarship in Law.

The Lectures of the Professors and subjects appointed for Scholarship Examination in the preceding years.
Sugden—The Law of Vendors and Purchasers.
Furlong—Law of Landlord and Tenant.
Taylor—Treatise on the Law of Evidence.
Stephen—Treatise on the Principles of Pleading.
Hallam—Constitutional History.
May's Constitutional Law.

DEGREES IN LAW.

Candidates for the Diploma of Elementary Law must have passed a Matriculation Examination* (see page 10), and pursued the following

Course of Study for the Diploma of Elementary Law.

First Session—Law of Property and Principles of Conveyancing—Jurisprudence.
The Course of the Professor of English Law for the Class of the First Year, "The Law of Real Property," comprises Elementary Instruction in this branch of Law, and in practical Conveyancing. The text-book read is Williams on "Real Property." The first volume of Stephens' edition of Blackstone's Commentaries, and the second volume of Kerr's edition, are recommended for perusal.
Second Session—Equity and Bankruptcy—Civil Law.
The Course of the Professor of English Law for the Class of the Second Year, "The Law of Personal Property," Equity, and "Bankruptcy," comprise instructions in those branches of law, and in the practical application of Precedents, &c. The text-books read are Williams on "Personal Property," Smith's "Manual of Equity," "The late Statute of Bankruptcy and Insolvency," by Adams. The second volume of Stephens' and Kerr's editions of Blackstone's Commentaries, and Smith's "Mercantile Law," are recommended for perusal.
Third Session—Common and Criminal Law.
The Course of the Professor of English Law for the Class of the Third Year, "Common and Criminal Law," comprises the History, Constitution, and Jurisdiction of the several Courts of Justice; Procedure in Crown and Civil Causes at Law and in Equity, as also in the Local Courts. The text-

* NOTE.—It will be sufficient for such Candidate to have passed his Examination at *any* time previous to applying for the Diploma. By the Act of Parliament, 14 and 15 Vic., cap. 88, it is provided, that every person who, as a Matriculated or Non-Matriculated Student, shall have attended the prescribed Lectures, and passed the prescribed Examinations of the Professors of the Faculty of Law for two Collegiate years, and who shall have duly served as an apprentice or clerk by contract in writing, duly stamped at or before the signing thereof, or within six months after, for the term of four years, shall, at any time after the expiration of five years from the commencement of such attendance on Lectures, or of such a period of service, whichever shall first happen, be qualified to be admitted as an Attorney or Solicitor as fully and effectually as any person having been bound, and having served five years is now qualified to be admitted. See also the same Act for the privileges extended to Graduates of the Queen's University, respecting admission to the profession of Attorney or Solicitor.

books are the third and fourth volumes of Blackstone's Commentaries, Stephens' and Kerr's editions, Broom's "Common Law," Broom's "Maxims," Smith's "Leading Cases," and Copinger's "County Courts," are recommended for perusal.

Students intending to proceed for the certificate of the Law Professors, so as to entitle themselves to serve an apprenticeship of four years instead of five, under the Act for amending the several Acts for the regulation of Attorneys and Solicitors (14 and 15 Vict., chap. 88), must enter their names with the Registrar of one of the Queen's Colleges of Cork, Belfast, and Galway, and pay the necessary College and Class Fees to the Bursar before the commencement of the Law Lectures in each Session.

Such Students need not pass the Matriculation Examination, but must attend the Lectures, and pass the College Examinations prescribed for the first and second years, of the course of study for Candidates for the Diploma in Elementary Law.

Candidates for the Degree of LL.B. will be admitted to Examination for that Degree from the Queen's University in Ireland, provided they shall have proceeded to the Degree of A.B., and shall have attended the Lectures and passed the Examinations prescribed for the Diploma of Elementary Law.

Students who have obtained the Degree of LL.B. will, at the expiration of two years after they have obtained the Degree, be admitted to the Examination for the Degree of LL.D. They are examined in the Laws of the Admiralty and Ecclesiastical Courts of England and Ireland, and in International Law.

Books suggested:

Lord Hale's Treatise, De Jure Maris.
Dr. FitzHenry Townsend's statement of the differences in Jurisdiction and Practice between the English and Irish Courts of Admiralty, annexed to the Report of the Royal Commission of Inquiry, 1864.
Rogers' Ecclesiastical Law.
Wheaton's International Law.
"Historicus," Letters of, on International Law.

Table of Class Fees.

ARTS CURRICULUM.

FIRST SESSION.

	£	s.	d.
English (One Term),	1	0	0
Greek,	2	0	0
Latin,	2	0	0
A Modern Continental Language,	2	0	0
Mathematics (First Course),	2	0	0
College Fee,	0	10	0

SECOND SESSION.

Logic (One Term),	1	0	0
Natural Philosophy,	2	0	0
Greek (Second Course),	2	0	0
Latin (Second Course),	2	0	0
Modern Continental Languages (Second Course),	1	0	0
Mathematics (Second Course),	2	0	0
College Fee,	0	5	0

THIRD SESSION.

English Language and Literature,	2	0	0
Metaphysics, or History, or Political Economy (Two Terms), each,	2	0	0
Chemistry,	2	0	0
Zoology or Botany,	2	0	0
College Fee,	0	5	0

ENGINEERING CURRICULUM.

FIRST SESSION.

	£	s.	d.
Mathematics (First Course),	2	0	0
Chemistry,	2	0	0
Modern Languages,	2	0	0
Geometrical Drawing,	2	0	0
Office Work,	2	0	0
Mineralogy, Geology, and Physical Geography,	2	0	0
College Fee,	0	10	0

SECOND SESSION.

Mathematics (Second Course),	2	0	0
Experimental Physics,	2	0	0
Civil Engineering,	2	0	0
*Office Work,	2	0	0
College Fee,	0	5	0

THIRD SESSION.

Natural Philosophy, applied,	2	0	0
Mathematical Physics,	2	0	0
Civil and Mechanical Engineering,	2	0	0
*Office Work,	2	0	0
College Fee,	0	5	0

* For students who have attended this course in the first year the fee is only £1.

Appendix A.

General Regulations of College, &c.

TABLE OF HOURS OF LECTURE.

Name of the Class.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Senior Greek,	9	9	10	–	9	–
Junior Greek,	10	–	9	9	10	–
Extra Greek,	–	10	–	10	–	–
Senior Latin,	10	–	9	–	10	–
Junior Latin,	9	10	10	10	–	–
Extra Latin,	–	11	–	11	–	–
English Language,	–	11	–	11	–	10
English Literature,	–	12	–	12	–	11
History,	12	–	12	–	12	–
Medical French,	12	–	12	–	12	–
Senior French (*Arts and Engineering*),	1	–	1	–	1	–
Junior French (*Arts and Engineering*),	2	–	2	–	2	–
German or Italian,	–	2	–	2	–	2
Celtic Languages,	12	–	12	–	12	–
Logic,	–	12	–	12	–	9
Metaphysics,	–	1	–	1	–	10
Political Economy and Jurisprudence,	–	11	11	11	11	–
Senior Mathematics,	2	–	2	–	2	–
Junior Mathematics,	12	–	12	–	12	–
Third Year's Mathematics,	3	–	3	–	3	–
Mathematical Physics,	–	–	12	–	12	–
Mathematical Physics (*Engineering*),	1	–	–	1	–	–
Experimental Physics, Senior,	11	–	11	–	11	–
Experimental Physics, Junior,	–	11	–	11	–	–
Engineering Physics,	–	1	–	–	1	–
Physics (Honor),	12	–	–	12	–	–
Chemistry,	11	–	11	–	11	–
Practical Chemistry,*	2	–	2	–	2	–
Zoology and Botany,	3	–	3	–	3	–
Geology and Mineralogy,	–	2	–	2	–	10
Senior Engineering,	12	–	12	–	12	–
Junior Engineering,	–	10	–	10	–	10
Geometrical Drawing,	10	–	10	–	10	–
Office Work (10 till 2),	–	10	–	10	–	10
Anatomy and Physiology,	1	1	1	1	1	–
Practical Anatomy,	12	12	12	12	12	–
Medicine,	3	–	3	–	3	–
Surgery,	–	4	–	4	–	1
Materia Medica,	–	3	–	3	–	12
Midwifery,	4	–	4	–	4	–
Medical Jurisprudence,	–	12	–	12	1	–
English Law (1st year),	–	11	11	11	11	–
English Law (2nd year),	–	3	3	3	3	–
English Law (3rd year),	–	9	9	9	9	–
English Law (4th year),	–	12	12	12	12	–
Jurisprudence,	–	1	1	1	1	–
Civil Law,	–	4	4	4	4	–
Constitutional and International Law,	–	10	10	10	10	–

The Fees payable by Students, whether Matriculated or Non-matriculated, to the several Professors, for attendance on the several Pass Courses of Lectures or instruction, which are now or may be hereafter prescribed by the College Council, for any Degree or other University distinction, shall be £1 for each Course extending over one Term only, and £2 for each Course extending over more than one Term of a Session, when attended for the first time, and £1 for each re-attendance on the same; except that the Fee payable for the Course of Anatomy and Physiology shall be £3 when attended for the first time, and £2 for every subsequent attendance; except also, that the Fee payable for Practical Anatomy or Practical Chemistry, shall be £3 for each attendance.

In the case of Students receiving special instructions, not prescribed as a

* If it be necessary to divide the Practical Chemistry Class, the hours for the Second Class will be at two on Tuesday and Thursday, and eleven on Saturday.

qualification for a Degree or other University distinction, or attending Honor Courses of Lectures, the Council shall have power to fix the amount of the Fee to be paid by each Student; provided that the Fee to be paid for any Honor Course of Lectures which Students are entitled to substitute for a prescribed Pass Course, shall in no case be less than £2. *Appendix A.* General Regulations of College, &c.

PROGRAMME OF THE TIMES AND SUBJECTS OF THE SCHOLARSHIP EXAMINATIONS FOR THE SESSION 1869-70.

Examination Days.	From 9 to 12 o'clock.	From 2 to 5 o'clock.
Thursday, October 21st,	Greek. Geometrical Drawing.	Greek.
Friday, October 22nd, .	Latin.	Mathematics.
Saturday, October 23rd,	Modern Languages.	Pathology. Latin.
Monday, October 25th,	Materia Medica. Therapeutics. English Language (1st year).	Zoology and Botany. Practical Anatomy. History and English Lit. (senior).
Tuesday, October 26th,	English Literature (2nd and 3rd year).	Anatomy and Physiology.
Wednesday, Oct. 27th,	Surveying, &c. Surgery.	Practical Chemistry.
Thursday, October 28th,	Political Economy.	Midwifery.
Friday, October 29th, .	Logic. Metaphysics.	Chemistry.
Saturday, October 30th,	Natural Philosophy.	Geology and Mineralogy.
Thursday, Dec. 1st, .	English Law.	Civil Law.

APPENDIX.

Outlines of the Courses of Lectures delivered by the Professors of the Faculty of Arts.

LITERARY DIVISION OF THE FACULTY OF ARTS.

In Greek and Latin the classification of the Students is irrespective of their Collegiate standing; those of the First and Second years being distributed between two classes according to their proficiency. There is also in each of these Departments an Extra Class, the attendance on which is voluntary, and which consists generally of those Students who propose to become Candidates for Degree of A.M. or Classical Honors in the Queen's University, or for appointments in the Indian Civil Service.

Both the Extra and Ordinary Classes are open to Non-Matriculated Students, *i.e.* to gentlemen who have not yet commenced their Undergraduate course, or who do not intend to take *Degrees in Arts.*

THE GREEK LANGUAGE.

Professor, JOHN RYALL, LL.D.

Junior Class: Monday, Wednesday, Thursday, and Friday.—Xenophon, Anab. Book VII.

Second Year: Monday, Wednesday, Thursday, and Friday.—Sophocles—Philoctetes; Demosthenes in Midiam.

Third Year: Tuesday, Thursday.—Æschylus—Eumenides; Thucydides, Book VI.

Exercises in Prose and Verse, according to the proficiency of the Students.

Appendix A.

General Regulations of College, &c.

The Latin Language.

Professor, Bunnell Lewis, M.A., F.S.A.

Senior Class, Monday, Wednesday, and Friday:
Juvenal—Satires, XIII.—XVI.
Cicero—De Natura Deorum. Book I., beginning at c. 21.
Junior Class, Monday, Tuesday, Wednesday, and Thursday:
Livy—Part of Book XXIII.
Virgil—Georgics, Book II.
Exercises in both Classes chiefly from Arnold's Introduction to Latin Composition.
Extra and Third Year's Class, Tuesday and Thursday:
Tacitus—Annals, Book IV.
Lucretius, Book III.

In this Class special attention is paid to original Composition, and to translation from English Authors into Latin.

History, English Literature, and the English Language.

Professor, William Rushton, M.A.

1st and 2nd Term. { History—Monday, Wednesday, and Friday.
English Literature—Tuesday, Thursday, and Saturday.
2nd Term—The English Language—Tuesday, Thursday, Saturday.

History:

1. European History from the decline of the Roman Empire to the present time.
2. History of Britain and Ireland.

English Literature:

The Course will include the History of English Literature, along with a Critical Examination of its Standard Works from the earliest period up to the present day.

The English Language:

1. The History of the English Language.
First Year.—Text Book, Craik's Outlines.
Third Year.—Text Books, Max Müller on the Science of Language.
Marsh's Lectures.
2. Grammar and Composition.
Text Books, Latham—English Language.
Adams—Elements of the English Language.
Rushton—Rules and Cautions in English Grammar.
Campbell's Philosophy of Rhetoric.
Whately's Rhetoric.

English Composition.
Essays on subjects discussed in the Lectures. Translations: Analysis. Original Essays.

Modern Languages.

Professor, R. De Vericour, M.A.

French Class (Medical), Mondays, Wednesdays, and Fridays, at 12 o'clock.
Senior French (Arts and Engineering), Mondays, Wednesdays, and Fridays, at 1 o'clock.
Junior French Class (Arts and Engineering), Mondays, Wednesdays, and Fridays, at 2 o'clock.
German or Italian, Tuesdays and Fridays, at 2 o'clock.
Medical French—Lectures sur les Sciences, par Achille Comte. Extracts from Bichat, Andral, Lallemand, and Chomel. Weekly Lectures on the Grammar and Idioms.
Senior and Junior French—Corneille's Cid and Cinna. Fables de Lafontaine. Racine's Athalie, and Esther. Histoire de la Revolution Française, par Mignet. La Misanthrope and L'Avare of Molière. Histoire de la Littérature Française, par Demogeot. Lectures sur les Sciences, par Achille Comte. Weekly Lectures on the Grammar and Idioms.
Italian—Silvio Pellico. Tasso. Extracts from Machiavelli, Guicciardini, Davila, Manzoni. Weekly Lectures.
German—Goethe's Ballads and Iphigenie. Schiller's Wilhelm Tell. National-Literature, Von A. F. Villmar. Weekly Lectures.

SPECIAL COURSE NOT REQUIRED FOR A DEGREE.—CELTIC LANGUAGES.

Professor, OWEN CONNELLAN, Esq.

Monday, Wednesday, and Friday.

Subject—I. The Celtic Family of Languages; and its existing derivations, the Erse or Gaelic, Manx, Welch, Armorican, and Hiberno-Celtic. The Ogham Alphabet. The Ancient Literature of Ireland, viz.:—The earlier Bardic Compositions, the Ossianic Poems and Fenian Legends; View of the Contemporaneous state of Ireland.*

,, II. The Irish Language as now extant, its Grammar, Vocabulary, and Dialects. In this part of the course, the Student will be taught to speak and write the language grammatically.

* The Lectures will be illustrated by reference to Irish MSS., and such publications on Irish Historical and general Literature as are at present accessible.

SCIENCE DIVISION OF THE FACULTY OF ARTS.

MATHEMATICS.

Professor, CHARLES NIVEN, B.A.

Junior Class, Monday, Wednesday, and Friday.
Subjects—Arithmetic, Algebra, Geometry, and Plane Trigonometry.

Second Year's Class, Monday, Wednesday, and Friday.
Subjects—Analytical Geometry, Trigonometry, Differential and Integral Calculus.

Third Year's Class:
Subjects—Geometry of three dimensions, Differential Equations, &c.

Exercises are regularly set in each of the Classes.

LOGIC AND METAPHYSICS.

Professor, GEORGE SIDNEY READ, M.A.

2nd Term, . Logic, . Tuesday, Thursday, and Saturday.
1st & 2nd Terms, Metaphysics, Do. do. do.

Logic.—This Course consists of:—

I.—Lectures, Examinations, and Exercises in Aldrich's Compendium of Logic, occupying the early part of the Term, &c.

II.—A full discussion of Classification, the Theory of Hypothetical Syllogisms and of Induction, and the Analytic of Logical Forms, as contained in the works of Mill, Whately, Thompson, and Baynes.

Throughout the Course the Students will be expected to familiarize themselves with the reduction of arguments to their strict Logical Form by written exercises, which will be examined by the Professor.

Metaphysics.—This Course will embrace:—

I.—The Philosophy of the Inductive Sciences, illustrated by reference to Lord Bacon, Whewell, and Mill; and—

II.—The History of Mental Philosophy, comprising—

1st.—The origin, progress, and development of Modern Philosophy anterior to the rise of the Scottish School.

2nd.—A critical examination of the works of the more celebrated writers of that School.

3rd.—A brief view of the present state of Philosophy in the British Islands and on the Continent.

POLITICAL ECONOMY.

Professor, RICHARD HORNER MILLS, M.A.

Political Economy.—The nature and distribution of wealth, the principles which regulate Rents, Profits, and Wages; the Principles of Commerce, of Taxation, of the Funding System, and of Currency and Banking.

Books recommended:—

Adam Smith—Wealth of Nations.
Senior—Political Economy.
Fawcett's Manual of Political Economy.
John Stuart Mill—Political Economy.

Appendix A.

General Regulations of College, &c.

Richard H. Mills—Lectures on Currency and Banking (Second Edition.).
M'Culloch—Taxation and Funding (Third Edition).
Goschen on Foreign Exchanges.

The Course consists of Twenty-four Lectures, delivered in the months of December, February, and March; the Students are required in the intervals to prepare the subjects which will be pointed out by the Professor.

Chemistry.

Professor, John Blyth, M.D.

Monday, Wednesday, and Friday.

The Course is divided into Inorganic and Organic Chemistry.

In the first part are discussed the Laws of Combination and Affinity, Molecular Chemistry and Crystallography, and the History of the Non-Metallic, and Metallic substances.

In the Organic portion of the Course will be considered the subjects of Organic Analysis, Organic Series, Compound Radicals and Types, Metamorphosis of Organic Bodies, History of special Animal and Vegetable Bodies.

In treating of the Laws of Chemistry, and the History of Inorganic and Organic Bodies, those points will be chiefly dwelt upon which have a practical bearing in the Arts, Medicine, Engineering, and Agriculture. Thence, during the Course, attention will be directed to the application of Chemistry to Medicine and Physiology, to Metallurgic Operations, Chemical Manufactures, Building Materials, Soils, Manures.

Fee, for each Sessional Course, £2. Each subsequent Course in Medicine, £1.

Analytical Chemistry:

The Chemical Laboratory is open daily, except on Saturdays, from 10 to 4 o'clock, under the superintendence of the Professor, for students desirous of prosecuting an extended course of qualitative and quantitative analysis, and for the purpose of original investigation in connexion with the arts, or in the higher departments of Scientific Chemistry.

Natural Philosophy.

Professor, John England, M.A.

Experimental Physics (Senior):

Text Books—Galbraith and Haughton's Manuals of Mechanics, Hydrostatics, &c.; Jamin; Traite de Physique.

Experimental Physics (Junior):

Text Books—Ganot, Traite de Physique.

Mathematical Physics:

Text Books—Duhamel's *Mecanique*. Parkinson's *Optics*. Brinkley's *Astronomy*.

Engineering Physics:

Text Books—Tate's *Exercises in Mechanics*, selections from the works of Mosely, De Pambour, Weisbach, Twisden's Practical Mechanics, &c.

Natural History.

Professor, Joseph Reay Greene, B.A., M.D.

Monday, Wednesday, and Friday.

The Lectures delivered by the Professor of Natural History are as follows:—

A Course of Lectures on General Zoology.
A Course of Lectures on Botany.

Students may obtain Certificates of Attendance on all or any of these Courses.

Text Books recommended:

In Botany—"Elementary Course of Botany," by Henfrey.
In Zoology—"Zoologie" (in Cours Elémentaire d'Histoire Naturelle), par Milne Edwards; or the English translation of the same work by Dr. Knox.

Such Students as desire during the Summer months to pursue the study of Botany in the field, are requested to provide themselves with Lindley's "Descriptive Botany," and Bentham's "Handbook of the British Flora."

Geology and Mineralogy.

Professor, Robert Harkness, F.R.SS.L. & E., F.G.S.

Tuesday, Thursday, and Saturday.

General Structure of the Earth: the causes at present in operation which modify its surface; Nature of Rocks which enter into composition with the crust of the Globe; description and classification of Sedimentary Deposits; Organic Remains; Physical Geography of the Earth during the several geological epochs; characters and nature of Igneous, Plutonic, and Metamorphic Rocks; Mineral Veins—their contents and mode of occurrence; application of Geology to Engineering, Mining, Agriculture and Land Improvement.

Forms, Structure, Physical and Chemical characters of Minerals; descriptions of the most important simple minerals—circumstances and conditions under which they are found.

Civil Engineering.

Professor, Alexander Jack, M.A.

First Year.—Monday, Wednesday, and Friday.

Subject of Lectures—Orthographic Projection; Descriptive Geometry; Shadows; Isometric Projection; Perspective; Geometry of the Oblique Bridge; Principles of Architecture.

Text Books—Hall's Descriptive Geometry; Engineer and Machinist's Drawing Book; Rickman's Architecture; Buck on Oblique Bridges.

Second Year.—Tuesday, Thursday, and Saturday.

Subject of Lectures—Surveying and Levelling.

Text Books—Rankine's Civil Engineering; Cotton's Manual of Railway Engineering; Williams' Geodesy.

Third Year.—Monday, Wednesday, and Friday.

Materials used in Construction; Principles of Construction of Bridges, Roads, Railways, Canals; Hydraulic Engineering; Strength of Materials; Principles of the Construction of the different Machines employed by the Engineer.

Drawing Office—Attended by all the Classes—Tuesday, Thursday, and Saturday.

The First Year's Class are chiefly employed in drawing the problems given at lectures, and a few easy examples of their applications. The Second and Third Years' Classes, in making working drawings of examples of the subjects of lectures, and in Mapping.

Practical Instruction in the Field in the use of Surveying Instruments will be given during the Session.

Special Prospectus of Courses of Instruction given in the Colleges which are applicable to the Examination for the Indian Civil Service.

Subjects of Examination for the Indian Civil Service.	*Lectures on these Subjects in Queen's College, Cork.*
1. English Language and Literature:	History and English Language—*Professor*, William Rushton, M.A.
a. Composition, Marks, 500	*First Term.*—Modern History: Monday, Wednesday, and Friday.
b. English Literature and History, including that of the Laws and Constitution, Marks, 1,000	*Second Term.*—English Literature: Tuesday, Thursday, and Saturday. History of the English Language: Tuesday, Thursday, Saturday.
1,500	English Composition will, at the stated periods, be required from the students.

Appendix A.

Special Prospectus of Courses for Competitive Examinations.

2. LANGUAGE, LITERATURE, and HISTORY of GREECE:
Marks, 750

GREEK—*Professor*, John Ryall, LL.D.
Senior Class: Monday, Friday, Wednesday.
Junior Class: Monday, Friday, Wednesday, Thursday.
Extra Class: Tuesday, Thursday.

3. LANGUAGE, LITERATURE, and HISTORY of ROME:
Marks, 750

LATIN—*Professor*, Bunnell Lewis, M.A. F.S.A.
Senior Class: Monday, Wednesday, Friday.
Junior Class: Monday, Tuesday, Wednesday, Thursday.
Extra Class: Tuesday and Thursday.

The Extra Class, both in Latin and Greek, the attendance on which is voluntary, consists generally of those students who propose to become Candidates for the Degree of M.A., or Classical Honors, in the Queen's University, or for appointments in the Indian Civil Service.

4. LANGUAGE, LITERATURE, and HISTORY of FRANCE:
Marks, 375

FRENCH—*Professor*, R. De Vericour, M.A.
Senior Class: Monday, Wednesday, Friday.
Junior Class: Monday, Wednesday, Friday.

5. LANGUAGE, LITERATURE, and HISTORY of GERMANY:
Marks, 375

GERMAN.
Tuesday, Thursday.

6. LANGUAGE, LITERATURE, and HISTORY of ITALY:
Marks, 375.

ITALIAN.
Monday, Wednesday, and Friday.

7. MATHEMATICS, Pure and Mixed:
Marks, 1,250

MATHEMATICS—*Professor*, Charles Niven, B.A.
Junior Class: Monday, Wednesday, Friday.
Senior Class: Monday, Wednesday, Friday.

MATHEMATICAL PHYSICS—*Professor*, John England, M.A.
Tuesday, Thursday, and Saturday.

8. NATURAL SCIENCES: that is, Chemistry, Electricity, and Magnetism, Natural History, Geology, and Mineralogy:
Marks, 500

*** No Candidate will be allowed to be examined in more than three of the branches of knowledge included under this head, and the total (500 marks) may be obtained by adequate proficiency in any three.

CHEMISTRY—*Professor* Blyth, M.D.
Monday, Wednesday, and Friday.

EXPERIMENTAL PHYSICS (Electricity and Magnetism)—*Professor*, John England, M.A.
Monday, Wednesday, and Friday.

NATURAL HISTORY—*Professor*, J. R. Greene, B.A., M.D.
Monday, Wednesday, and Friday.

GEOLOGY and MINERALOGY—*Professor*, Robert Harkness, F.R.SS.L. & E., F.G.S.
Tuesday, Thursday, and Saturday.

9. MORAL SCIENCES: that is, Logic, Mental and Moral Philosophy: Marks, 500	LOGIC and METAPHYSICS—*Professor*, G. S. Read, M.A. Logic: Tuesday, Thursday, Saturday. Metaphysics: Tuesday, Thursday, Saturday. JURISPRUDENCE and POLITICAL ECONOMY—*Professor*, Richard Horner Mills, M.A.	*Appendix A.* Special Prospectus of Courses for Competitive Examinations.

COURSES of INSTRUCTION given in the COLLEGE which are applicable to the COMPETITIVE EXAMINATION for ADMISSION to the ROYAL MILITARY ACADEMY at WOOLWICH.

Subjects of Examination for the direct appointment to the Practical Class at Woolwich.	*Lectures on these Subjects in Queen's College, Cork.*
MATHEMATICS (Pure): Marks, 2,500	*Professor*, Charles Niven, B.A. Junior Class: Monday, Wednesday, Friday. Senior Class: Monday, Wednesday, Friday.
MATHEMATICS (Mixed):— Statics, Dynamics, Hydrostatics: Marks, 1,000	*Professor*, John England, M.A. Tuesday, Thursday, and Saturday.
LANGUAGE of ANCIENT ROME: Marks, 1,500	*Professor*, Bunnell Lewis, M.A., F.S.A. Junior Class: Monday, Tuesday, Wednesday, Thursday.
LANGUAGE of ANCIENT GREECE: Marks, 1,500	*Professor*, John Ryall, LL.D. Junior Class: Monday and Friday, Wednesday and Thursday.
LANGUAGE of FRANCE: Marks, 1,000	*Professor*, Raymond de Vericour, M.A. Monday, Wednesday, and Friday.
And GERMANY: Marks, 1,000	
ENGLISH LANGUAGE, LITERATURE, COMPOSITION, HISTORY and GEOGRAPHY (Modern): Marks, 3,000	*Professor*, William Rushton, M.A. Tuesday, Thursday, and Saturday.
EXPERIMENTAL SCIENCES:— Chemistry: Marks, 1,000	*Professor*, John Blyth, M.D. Monday, Wednesday, and Friday.
HEAT, ELECTRICITY, including MAGNETISM: Marks, 1,000	*Professor*, John England, M.A. Monday, Wednesday, and Friday.
NATURAL SCIENCES:— Mineralogy and Geology: Marks, 1,000	*Professor*, Robt. Harkness, F.R.SS.L. & E., F.G.S.
DRAWING, *i.e.*, Elementary Geometrical Drawing, including the use of Drawing Instruments: Marks, 500	*Professor*, Alexander Jack, M.A. Monday, Wednesday, and Friday.
Machinery, Architectural, Topographical, Landscape, or Figure Drawing: Marks, 500	Monday, Wednesday, and Friday.

Appendix A.

Special Prospectus of Courses for Competitive Examinations.

Competitive Examinations for admission are held in London twice a year, in January and July. They are conducted by Examiners appointed for the purpose, in the presence and under the superintendence of the Council of Military Education.

The Candidates must be between 16 and 19 years of age.

The admissions will be determined by the result of the examination, the subjects of which will be as follows, viz.:—

			Marks.
1. Mathematics,	Pure,	Section I. Arithmetic, Algebra, Euclid, Plane Trigonometry,	2,000
		Section II. Spherical Trigonometry, elements of Co-ordinate Geometry, and of the Differential and Integral Calculus,*	500
	Mixed:—Statics, Dynamics, and Hydrostatics,		1,000
			3,500
2. English Language and Composition,			1,000
3. History of England, its Dependencies and Colonies,			1,000
4. Geography (Modern),			1,000
5. Classics,	Latin Language,		1,500
	Greek ditto,		1,500
6. French Language,			1,000
7. German ditto,			1,000
8. Hindustani ditto,			1,000

The examination in French, German, and Hindustani, will include writing from dictation.

9. Experimental Sciences, *i.e.*, Chemistry, Heat, Electricity, including Magnetism,		1,000
10. Natural Sciences, *i.e.*, Mineralogy and Geology,		1,000
11. Drawing,	Elementary Geometrical Drawing, including the use of Drawing Instruments,	500
	Free-hand Drawing of Machinery, Architectural, Topographical, Landscape, or Figure Subjects,	500

* *Syllabus of Examination in the Differential and Integral Calculus.*

DIFFERENTIAL CALCULUS.

The meaning of Differentiation.
The Differentiation of Elementary Functions of one independent variable.
The theorems of Taylor and Maclaurin, with their applications.
The theory of Maxima and Minima, with its applications.
The equations to theTangents, Normals, and Asymptotes of Plane Curves.
The curvature of Plane Curves and their radii of curvature and evolutes.
The Differential Coefficients of the Arcs and Areas of Plane Curves to rectangular and polar Co-ordinates, and of the surfaces and volumes of solids of revolution.

INTEGRAL CALCULUS.

The meaning of Integration.
The Integration of Elementary Functions.
The Integration of Rational Fractions.
The determination of the lengths and areas of Plane Curves, and of the surfaces and volumes of solids of revolution.

No Candidate will be allowed to be examined in more than five subjects, of which one must be Mathematics; and no one who does not obtain at least 700 marks in Section I. of Pure Mathematics will be eligible for an appointment.

Residences.

There is no accommodation for the residence of students within the College, but it is provided by the Statutes that every Matriculated Student, being under the age of Twenty-one Years, shall reside, during the College Terms, with his parent or guardian, or with some relation or friend, to whose care he shall have been committed by his parent or guardian, or in one of the Boarding-houses licensed by the President of the College and arranged for the reception of students, who are then placed under the moral care and spiritual charge of the Deans of Residence of their respective creeds.

The Terms for Board and Lodging are generally at the rate of from £30 to £40 a year.

DEANS of RESIDENCES.

Church of England, . . .	Rev. George Webster, D.D.
Presbyterian Church, . . .	Rev. William Magill.
Wesleyan Communion, . . .	Rev. Edward Best.
Non-Subscribing Presbyterian, . .	Rev. W. Whitelegge, M.A.

N.B.—Letters from persons desiring further information, to be addressed to the Registrar.

Signed,
By order of the President,
ROBERT JOHN KENNY, *Registrar.*

APPENDIX B.

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

SELECTION OF EXAMINATION PAPERS USED AT THE SESSIONAL EXAMINATIONS.

SECOND YEAR'S AND SENIOR GREEK.

Translate :—

(A).—HOMER—*Iliad*, Book XVI., vv. 297–324.

Ὡς δ' ὅτ' ἀφ' ὑψηλῆς κορυφῆς ὄρεος μεγάλοιο
κινήσῃ πυκινὴν νεφέλην στεροπηγερέτα Ζεὺς,
ἔκ τ' ἔφανεν πᾶσαι σκοπιαὶ καὶ πρώονες ἄκροι
καὶ νάπαι, οὐρανόθεν δ' ἄρ' ὑπερράγη ἄσπετος αἰθήρ,
ὣς Δαναοὶ νηῶν μὲν ἀπωσάμενοι δήϊον πῦρ
τυτθὸν ἀνέπνευσαν, πολέμου δ' οὐ γίγνετ' ἐρωή.
οὐ γάρ πώ τι Τρῶες Ἀρηϊφίλων ὑπ' Ἀχαιων,
προτροπάδην φοβέοντο μελαινάων ἀπὸ νηῶν,
ἀλλ' ἔτ' ἄρ' ἀνθίσταντο, νεῶν δ' ὑπόεικον ἀναγκῃ.
Ἔνθα δ' ἀνὴρ ἕλεν ἄνδρα, κεδασθείσης ὑσμίνης,
ἡγεμόνων. πρῶτος δὲ Μενοιτίου ἄλκιμος υἱὸς
αὐτίκ' ἄρα στρεφθέντος Ἀρηϊλύκου βάλε μηρὸν
ἔγχεϊ ὀξυόεντι, διαπρὸ δὲ χαλκὸν ἔλασσεν·
ῥῆξεν δ' ὀστέον ἔγχος, ὁ δὲ πρηνὴς ἐπὶ γαίῃ
κάππεσ'. ἀτὰρ Μενέλαος Ἀρήϊος οὗτα Θόαντα
στέρνον γυμνωθέντα παρ' ἀσπίδα, λυσε δὲ γυῖα.
Φυλείδης δ' Ἄμφικλον ἐφορμηθέντα δοκεύσας
ἔφθη ὀρεξάμενος πρυμνὸν σκέλος, ἔνθα πάχιστος
μυὼν ἀνθρώπου πέλεται· περὶ δ' ἔγχεος αἰχμῇ
νεῦρα διεσχίσθη· τὸν δὲ σκότος ὄσσε κάλυψεν.
Νεστορίδαι δ', ὁ μὲν οὗτασ' Ἀτύμνιον ὀξέϊ δουρὶ
Ἀντίλοχος, λαπάρης δέ διήλασε χάλκεον ἔγχος·
ἤριπε δὲ προπάροιθε· Μάρις δ' αὐτοσχεδὰ δουρὶ
Ἀντιλόχῳ ἐπόρουσε κασιγνήτοιο χολωθείς,
στὰς πρόσθεν νέκυος· τοῦ δ' ἀντίθεος Θρασυμήδης
ἔφθη ὀρεξάμενος πρὶν οὐτάσαι, οὐδ' ἀφάμαρτεν,
ὦμον ἄφαρ· πρυμνὸν δὲ βραχίονα δουρὸς ἀκωκὴ
ῥύψ' ἀπὸ μυώνων, ἀπὸ δ' ὀστέον ἄχρις ἄραξεν.

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

1. Explain the form *στεροπηγερέτα*.
2. In what different senses is the word *ἐρωή* used in Homer, and how may the discrepancy be explained?
3. What different interpretations and derivations have been proposed for the epithet *ὀξυόεις*, v. 309?
4. Distinguish between *μυιών* and *νεῦρον*.
5. Explain the epithet *πρυμνόν*, v. 314.
6. Why is the aorist tense employed in the verbs of the first sentence of the extract, viz., *κινήσῃ, ἔφανεν, ὑπερῤῥάγη*?

(B.)—Herodotus, Book IX., c. 10.

Ὁ μέν σφι ταῦτα συνεβούλευε, οἱ δὲ φρενὶ λαβόντες τὸν λόγον αὐτίκα, φράσαντες οὐδὲν τοῖσι ἀγγέλοισι τοῖσι ἀπιγμένοισι ἀπὸ τῶν πολίων, νυκτὸς ἔτι ἐκπέμπουσι πεντακισχιλίους Σπαρτιητέων, καὶ ἑπτὰ περὶ ἕκαστον ταξαντες τῶν εἰλώτων Παυσανίῃ τῷ Κλεομβρότου ἐπιτρέψαντες ἐξάγειν. Εγένετο μέν νυν ἡ ἡγεμονίη Πλειστάρχου τοῦ Λεωνίδεω· ἀλλ' ὁ μὲν ἦν ἔτι παῖς, ὁ δὲ τούτου ἐπίτροπός τε καὶ ἀνεψιός. Κλεόμβροτος γὰρ ὁ Παυσανίεω μὲν πατὴρ, Ἀναξανδρίδεω δὲ παῖς, οὐκέτι περιῆν, ἀλλὰ ἀπαγαγὼν ἐκ τοῦ Ἰσθμοῦ τὴν στρατιὴν τὴν τὸ τεῖχος δείμασαν, μετὰ ταῦτα οὐ πολλὸν χρόνον τινὰ βιοὺς ἀπέθανε. ἀπῆγε δὲ τὴν στρατιὴν ὁ Κλεόμβροτος ἐκ τοῦ Ἰσθμοῦ διὰ τόδε· θυομένῳ οἱ ἐπὶ τῷ Πέρσῃ ὁ ἥλιος ἀμαυρώθη ἐν τῷ οὐρανῷ. προσαιρέεται δὲ ἑωυτῷ Παυσανίης Εὐρυάνακτα τὸν Δωριέος, ἄνδρα οἰκίης ἐόντα τῆς αὐτῆς. Οἱ μὲν δὴ σὺν Παυσανίῃ ἐξεληλύθεσαν ἔξω Σπάρτης.

1. *νυκτός*. What idea of *time* is expressed by the gen. case?
2. *τὴν στρατιὴν τὴν*. Explain the use of the second article in this sentence.
3. Parse *βιούς*.
4. Explain the construction of the dative case in *θυομένῳ οἱ*.
5. How is the third person plur. of the perf. and pluperf. indicat. passive formed in the Ionic dialect? Illustrate your rule by the verbs *κλίνω, ἀναμίγνυμι, τρίβω, στέλλω*.
6. Where, and in what year was Herodotus born? Give the date B.C. and also according to Olympiads; explaining the rule for converting the date from one form to the other.

Third Year's Greek Class.

(A.)—1. *βρίζει γαρ αἷμα καὶ μαραίνεται χερὸς,*
μητροκτόνον μίασμα δ' ἔκπλυτον πέλει.
ποταίνιον γὰρ ὃν πρὸς ἑστίᾳ Θεοῦ,
Φοίβου καθαρμοῖς ἠλάθη χοιροκτόνοις.

Distinguish between *καθαρμός* and *ἱλασμὸς*, and define the term *ἀγνίτης*.

2. *μύζοιτ' ἄν, ἀνὴρ δ' οἴχεται φεύγων πρόσω.*
φίλοις γὰρ εἰσιν οὐκ ἐμοῖς προσίκτορες.

Of what twofold meanings are the terms *προσίκτωρ* and *προστρόπαιος* susceptible?

3. *ὁ δ' ἐξαλύξας οἴχεται νεβροῦ δίκην,*
καὶ ταῦτα κούφως ἐκ μέσων ἀρκυστάτων
ὤρουσεν, ὑμῖν ἐγκατιλλώψας μέγα.

Explain the construction of *δίκην* and *ταῦτα*, and derive *ἐγκατιλλώψας*.

4. Μῆλά τ' εὐθενοῦντα γᾶ ξὺν διπλοΐσιν ἐμβρύοις,
τρέφοι χρόνῳ τεταγμένῳ, γόνος δὲ πᾶς
πλουτόχθων ἑρμαίαν
δαιμόνων δόσιν τίοι.

Explain the allusion in *γόνος πλουτόχθων*.

5. πρὸς φῶς ἱερὸν τῶνδε προπομπῶν ἴτε, καὶ σφαγίων τῶνδ' ὑπο
σεμνῶν κατὰ γῆς συμέναι,
τὸ μὲν ἀτηρὸν χώρας κατέχειν, τὸ δὲ κερδαλέον πέμπειν, πόλεως
ἐπὶ νίκῃ.

To what does *κατὰ γῆς* refer? What difference was there in the character of the offerings to the Olympian Gods and to the Chthonic Genii respectively?

(B.)—1. Define the term *ἐρινύς* and distinguish between Erinnyes and Aræ. Under what title were the former worshipped at Athens? Is there any reason for supposing that the title *Eumenides* was not given by Æschylus himself to this tragedy?

2. What political objects are discernible in the composition of the Eumenides, in reference both to the internal affairs and external relations of Athens?

SOPHOCLES—

Translate:

(A.)—1. τίνι γὰρ ποτ' ἂν, ω φιλία γενέθλα,
πρόσφορον ἀκούσαιμ' ἔπος, τίνι φρονοῦντι καίρια;
ἄνετε μ', ἄνετε, παράγοροι.
τάδε γὰρ ἄλυτα κεκλήσεται.

Distinguish between *γένεθλα* and *γενέθλα*.

What notion of time is expressed in the form *κεκλήσεται*, and for what different purposes is the tense employed?

2. εἰ γὰρ ὁ μὲν θανών γᾷ τε καὶ οὐδεν ὢν
κείσεται τάλας,
οἱ δὲ μὴ πάλιν
δώσουσ' ἀντιφόνους δίκας,
ἐρροὶ τ' ἂν αἰδὼς
ἀπάντων τ' εὐσέβεια θνατῶν.

Do *θανών* and *οὐδὲν ὢν* mean the same thing here?

How do you defend the use of *οὐδέν*, instead of *μηδέν* after *εἰ*?

3. σκέψαι γὰρ εἴ σοι προσφιλῶς αὐτῇ δοκεῖ
γέρα τάδ' οὖν τάφοισι δέξασθαι νέκυς,
ὑφ' ἧς θανὼν ἄτιμος, ὥστε δυσμενὴς,
ἐμασχαλίσθη κἀπὶ λουτροῖσιν κάρᾳ
κηλῖδας ἐξέμαξεν.

Notice a various reading in this passage.

(B.)—What difference is discernible between Æschylus and Sophocles in their mode of dealing with the story of Orestes and Clytæmnestra?

Translate into Iambic verse:—

I had not thought to have unlockt my lips
In this unhallow'd air, but that this juggler
Would think to charm my judgment, as mine eyes,
Obtruding false rules prank't in Reason's garb.
I hate when Vice can bolt her arguments,
And Virtue has no tongue to check her pride.

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

FIRST YEAR'S AND JUNIOR GREEK CLASS.

Translate :—

(A.)—XENOPHON—*Anabasis*, Book VII., c. iv., 3–6.

Ἦν δὲ χιὼν πολλὴ καὶ ψῦχος οὕτως ὥστε τὸ ὕδωρ ὃ ἐφέροντο ἐπὶ δεῖπνον ἐπήγνυτο καὶ ὁ οἶνος ὁ ἐν τοῖς ἀγγείοις, καὶ τῶν Ἑλλήνων πολλῶν καὶ ῥῖνες ἀπεκαίοντο καὶ ὦτα. καὶ τότε δῆλον ἐγένετο οὗ ἕνεκα οἱ Θρᾷκες τὰς ἀλωπεκίδας ἐπὶ ταῖς κεφαλαῖς φοροῦσι καὶ τοῖς ὠσί, καὶ χιτῶνας οὐ μόνον περὶ τοῖς στέρνοις ἀλλὰ καὶ περὶ τοῖς μηροῖς, καὶ ζειρὰς μέχρι τῶν ποδῶν ἐπὶ τῶν ἵππων ἔχουσιν, ἀλλ' οὐ χλαμύδας. ἀφιεὶς δὲ τῶν αἰχμαλώτων ὁ Σεύθης εἰς τὰ ὄρη ἔλεγεν ὅτι εἰ μὴ καταβήσονται οἰκήσοντες καὶ πείσονται, ὅτι κατακαύσει καὶ τούτων τὰς κώμας καὶ τὸν σῖτον, καὶ ἀπολοῦνται τῷ λιμῷ. ἐκ τούτου κατέβαινον καὶ γυναῖκες καὶ παῖδες καὶ οἱ πρεσβύτεροι· οἱ δὲ νεώτεροι ἐν ταῖς ὑπὸ τὸ ὄρος κώμαις ηὐλίζοντο. καὶ ὁ Σεύθης καταμαθὼν ἐκέλευσε τὸν Ξενοφῶντα τῶν ὁπλιτῶν τοὺς νεωτάτους λαβόντα συνεπισπέσθαι. καὶ ἀναστάντες τῆς νυκτὸς ἅμα τῇ ἡμέρᾳ παρῆσαν εἰς τὰς κώμας. καὶ οἱ μὲν πλεῖστοι ἐξέφυγον· πλησίον γὰρ ἦν τὸ ὄρος· ὅσους δὲ ἔλαβε κατηκόντισεν ἀφειδῶς Σεύθης.

1. Why is αἰχμαλώτων in the gen. case?
2. What part of the verb is ἀπολοῦνται? Write down all the persons of the tense.
3. Parse συνεπισπέσθαι.
4. Why is τῆς νυκτός in the genit.?
5. Distinguish between φεύγω and ἐκφεύγω, φέρω and φορέω, ἀκοντίζω and κατακοντίζω.

(B.)—HOMER—*Iliad*, Book I., vv. 517–532.

Τὴν δὲ μέγ' ὀχθήσας προσέφη νεφεληγερέτα Ζεύς·
"ἦ δὴ λοίγια ἔργ', ὅτε μ' ἐχθοδοπῆσαι ἐφήσεις
Ἥρῃ, ὅτ' ἄν μ' ἐρέθῃσιν ὀνειδείοις ἐπέεσσιν.
ἦ δὲ καὶ αὔτως μ' αἰὲν ἐν ἀθανάτοισι θεοῖσιν
νεικεῖ, καί τέ μέ φησι μάχῃ Τρώεσσιν ἀρήγειν.
ἀλλὰ σὺ μὲν νῦν αὖτις ἀπόστιχε, μή σε νοήσῃ
Ἥρη· ἐμοὶ δέ κε ταῦτα μελήσεται, ὄφρα τελέσσω.
εἰ δ' ἄγε τοι κεφαλῇ κατανεύσομαι, ὄφρα πεποίθῃς·
τοῦτο γὰρ ἐξ ἐμέθεν γε μετ' ἀθανάτοισι μέγιστον
τέκμωρ· οὐ γὰρ ἐμὸν παλινάγρετον οὐδ' ἀπατηλὸν
οὐδ' ἀτελεύτητον, ὅ τι κεν κεφαλῇ κατανεύσω."
Ἦ, καὶ κυανέῃσιν ἐπ' ὀφρύσι νεῦσε Κρονίων·
ἀμβρόσιαι δ' ἄρα χαῖται ἐπερρώσαντο ἄνακτος
κρατὸς ἀπ' ἀθανάτοιο· μέγαν δ' ἐλέλιξεν Ὄλυμπον.
Τὼ γ' ὣς βουλεύσαντε διέτμαγεν· ἡ μὲν ἔπειτα
εἰς ἅλα ἅλτο βαθεῖαν ἀπ' αἰγλήεντος Ὀλύμπου.

1. Explain the form νεφεληγερέτα.
2. Supply the ellipsis after λοίγια ἔργα.
3. Derive ἐχθοδοπεῖν, παλινάγρετος, ἀπατηλός, αἰγλήεις.
4. Notice all the places in the extract where the letter *f* is required to support the metre.
5. Explain fully the following Epic forms, giving their equivalents in the κοινὴ διάλεκτος—ἐρειόμεν, ἴδμεν, ἀριστήεσσιν, ἀποαίρεο, δώῃσιν, ἔπλεο: Give the Epic forms of ἡμῖν, αὐτόν, ἄγειν, ἐμοῦ, ἔπεσι, πᾶσι.

(C.)—Translate into Greek :—

1. But when they were near, he ordered Xenophon to come in, having (with him any) two men whom he might choose.

2. Having said this he asked Medosades whether these things were true.

3. When Seuthes heard this he said that he would distrust none of the Athenians.

4. Now, if you chose, you might benefit us, and we might make you a great man.

STUDENTS OF THE THIRD YEAR.

Translate :—

PLATONIS, *Io*, 533 D.

Καὶ ὁρῶ, ὦ Ἴων, καὶ ἔρχομαί γέ σοι ἀποφαινόμενος, ὅ μοι δοκεῖ τοῦτο εἶναι. ἔστι γὰρ τοῦτο τέχνη μὲν οὐκ ὂν παρὰ σοὶ περὶ Ὁμήρου εὖ λέγειν, ὃ νῦν δὴ ἔλεγον, θεία δὲ δύναμις, ἥ σε κινεῖ, ὥσπερ ἐν τῇ λίθῳ, ἣν Εὐριπίδης μὲν Μαγνῆτιν ὠνόμασεν, οἱ δὲ πολλοὶ Ἡρακλείαν. καὶ γὰρ αὕτη ἡ λίθος οὐ μόνον αὐτοὺς τοὺς δακτυλίους ἄγει τοὺς σιδηροῦς, ἀλλὰ καὶ δύναμιν ἐντίθησι τοῖς δακτυλίοις, ὥστε δύνασθαι ταὐτὸν τοῦτο ποιεῖν ὅπερ ἡ λίθος, ἄλλους ἄγειν δακτυλίους, ὥστ' ἐνίοτε ὁρμαθὸς μακρὸς πάνυ σιδηρίων [καὶ δακτυλίων] ἐξ ἀλλήλων ἤρτηται· πᾶσι δὲ τούτοις ἐξ ἐκείνης τῆς λίθου ἡ δύναμις ἀνήρτηται. οὕτω δὲ καὶ ἡ Μοῦσα ἐνθέους μὲν ποιεῖ αὐτή, διὰ δὲ τῶν ἐνθέων τούτων ἄλλον ἐνθουσιαζόντων ὁρμαθὸς ἐξαρτᾶται.

1. Explain accurately the construction of the words beginning ἔστι γὰρ τοῦτο .... to εὖ λέγειν.

2. Distinguish between ὁ λίθος and ἡ λίθος.

3. ποιητικὴ γάρ που ἐστι τὸ ὅλον· Οὐκοῦν ἐπειδὰν λάβῃ τις καὶ ἄλλην τέχνην ἥν τιν' οὖν ὅλην, ὁ αὐτὸς τρόπος τῆς σκέψεως ἔστι περὶ ἁπασῶν τῶν τεχνων.—Translate. How does Socrates employ the principle here laid down, in his argument with Ion?

THUCYDIDES, Book V., chap. 46.

Τῇ δ' ὑστεραίᾳ ἐκκλησίᾳ ὁ Νικίας, καίπερ τῶν Λακεδαιμονίων αὐτῶν ἠπατημένων καὶ αὐτὸς ἐξηπατημένος περὶ τοῦ μὴ αὐτοκράτορας ὁμολογῆσαι ἥκειν, ὅμως τοῖς Λακεδαιμονίοις ἔφη χρῆναι φίλους μᾶλλον γίγνεσθαι, καὶ ἐπισχόντας τὰ πρὸς Ἀργείους πέμψαι ἔτι ὡς αὐτοὺς καὶ εἰδέναι ὅ τι διανοοῦνται, λέγων ἐν μὲν τῷ σφετέρῳ καλῷ, ἐν δὲ τῷ ἐκείνων ἀπρεπεῖ τὸν πόλεμον ἀναβάλλεσθαι· σφίσι μὲν γὰρ εὖ ἑστώτων τῶν πραγμάτων ὡς ἐπὶ πλεῖστον ἄριστον εἶναι διασώσασθαι τὴν εὐπραγίαν, ἐκείνοις δὲ δυστυχοῦσιν ὅτι τάχιστα εὔρημα εἶναι διακινδυνεῦσαι. ἔπεισέ τε πέμψαι πρέσβεις, ὧν καὶ αὐτὸς ἦν, κελεύσοντας Λακεδαιμονίους, εἴ τι δίκαιον διανοοῦνται, Πάνακτόν τε ὀρθὸν ἀποδιδόναι καὶ Ἀμφίπολιν, καὶ τὴν Βοιωτῶν ξυμμαχίαν ἀνεῖναι, ἣν μὴ ἐς τὰς σπονδὰς ἐσίωσι, καθάπερ εἴρητο ἄνευ ἀλλήλων μηδενὶ ξυμβαίνειν.

1. To what transaction does this extract refer?

2. Distinguish between ὑστέραιος and ὑστερός. Is the distinction always observed?

3. Does any distinction appear to be intended by the different forms ηπατημένων and εξηπατημένος.

4. ἐν μὲν τῷ σφετέρῳ καλῷ, ἐν δὲ τῷ. κ.τ.λ. Explain the force of the preposition here.

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

Translate into Greek :—

What necessity is there, soldiers, to make a long address, since we are here for the same contest? For this preparation seems to me more adapted to inspire confidence, than finely spoken words when the preparation is weak. For inasmuch as we are Argives and Mantinæans and Athenians and the chief of the islanders, how should not every one, with such allies and so numerous, be strong in the hope of victory, especially since we are matched with men fighting with all their forces and not picked, as we are, and more than that Siceliots, who despise us indeed, but will not withstand us, because their skill is inferior to their courage? And let this thought also present itself to every one, that we are far from our own country, and near no friendly land, unless you shall get one by fighting yourselves.

SECOND YEAR'S AND SENIOR GREEK CLASS.

DEMOSTHENES—*De falsâ Legatione*, 400.

Οὕτω τοίνυν αἰσχρὰ καὶ πολλὰ καὶ πάντα καθ' ὑμῶν πεπρεσβευκὼς περιὼν λέγει "τί δ' ἂν εἴποις περὶ Δημοσθένους, ὃς τῶν συμπρέσβεων κατηγορεῖ;" νὴ Δί', εἴτε βούλομαί γ' εἴτε μή, παρ' ὅλην μὲν τὴν ἀποδημίαν ὑπὸ σοῦ τοιαῦτα ἐπιβεβουλευμένος, δυοῖν δ' αἱρέσεως οὔσης, μοι νυνὶ, ἢ τοιούτων ὄντων τῶν πεπραγμένων δοκεῖν κοινωνεῖν ὑμῖν, ἢ κατηγορεῖν. ἐγὼ δ' οὐδὲ συμπεπρεσβευκέναι φημί σοι, πρεσβεύειν μέντοι σὲ μὲν πολλὰ καὶ δεινὰ, ἐμαυτὸν δ' ὑπὲρ τουτωνὶ τὰ βέλτιστα. ἀλλὰ Φιλοκράτης σοι συμπεπρέσβευκε, κἀκείνῳ σὺ, καὶ Φρύνων· ὑμεῖς γὰρ ταῦτ' ἐπράττετε, καὶ ταυτα πᾶσιν ὑμῖν ἤρεσκεν. ποῦ δ' ἅλες; ποῦ τράπεζα; ποῦ σπονδαί; ταῦτα γὰρ τραγῳδεῖ περιὼν, ὥσπερ οὐχὶ τοὺς ἀδικοῦντας τούτων ὄντας προδότας, ἀλλὰ τοὺς τὰ δίκαια ποιοῦντας. ἐγὼ δ' οἶδ' ὅτι πάντες οἱ πρυτάνεις θύουσιν ἑκάστοτε κοινῇ καὶ σὺνδειπνοῦσιν ἀλλήλοις καὶ συσπένδουσιν· καὶ οὐ διὰ ταῦθ' οἱ χρηστοὶ τοὺς πονηροὺς μιμοῦνται, ἀλλ' ἐὰν ἀδικοῦντα λάβωσί τινα αὐτῶν, τῇ βουλῇ καὶ τῷ δήμῳ δηλοῦσιν. ἡ βουλὴ ταὐτὰ ταῦτα, εἰσιτήρια ἔθυσε, συνεισῐάθη, σπονδῶν, ἱερῶν ἐκοινώνησεν· οἱ στρατηγοὶ, σχεδὸν ὡς εἰπεῖν αἱ ἀρχαὶ πᾶσαι. ἆρ' οὖν διὰ ταῦτα τοῖς ἀδικοῦσιν ἑαυτῶν ἔδωκαν ἄδειαν; πολλοῦ γε καὶ δεῖ. Λέων Τιμαγόρου κατηγόρει συμπεπρεσβευκὼς τέτταρα ἔτη, Εὔβουλος Θάρρηκος καὶ Σμικύθου συσσεσιτηκὼς, Κόνων ὁ παλαιὸς ἐκεῖνος Ἀδειμάντου συστρατηγήσας. πότεροι οὖν τοὺς ἅλας παρέβαινον καὶ τὰς σπονδὰς, Αἰσχίνη; οἱ προδιδόντες καὶ οἱ παραπρεσβεύοντες καὶ οἱ δωροδοκοῦντες ἢ οἱ κατηγοροῦντες; οἱ ἀδικοῦντες δηλονότι τὰς ὅλης γε τῆς πατρίδος σπονδὰς, ὥσπερ σὺ, οὐ μόνον τὰς ἰδίας.

1. Supply the ellipsis after *νὴ Δί'*.
2. Who were the Prytanes?
3. What part of speech is *εἰσιτήρια*? Explain the word.
4. State what is known of the persons mentioned in the extract.
5. Explain the words *ἅλες*, *τράπεζα*, *σπονδαί*, and the distinction between *αἱ τῆς πατρίδος σπονδαί* and *αἱ ἰδιαι σπονδαί*.
6. *ἢ βουλὴ ταὐτὰ ταῦτα*. What is the construction of the last two words?
7. Of what two interpretations is the concluding clause, from *οἱ ἀδικοῦντες* to *τὰς ἰδίας*, susceptible?

Translate into Greek :—

Men of the jury, it is a very easy thing for you to give judgment in this cause, and there is no need of many words. That the ship has been

saved and is safe, is admitted by our opponents themselves; for otherwise they would not have offered to pay the principal debt and a portion of the interest. She has not been brought back to Piræus. Therefore we the creditors say we have been wronged, and for this we sue, because the ship did not return to the port agreed on. Dionysodorus says he has done no wrong on this very account, because he is not bound to pay the whole interest, as the ship did not return to Pirèus. But what says the agreement? Nothing like what you say, Dionysodorus.

JOHN RYALL, *Professor.*

THIRD YEAR'S LATIN CLASS, 1869.

Translate—

TACITUS.—*Annals*, III., 50.

Contra Marcus Lepidus in hunc modum exorsus est: "Si, patres conscripti, unum id spectamus, quam nefaria voce Lutorius Priscus mentem suam et aures hominum polluerit, neque carcer neque laqueus, ne serviles quidem cruciatus in eum suffecerint. Sin flagitia et facinora sine modo sunt, suppliciis ac remediis principis moderatio maiorumque et vestra exempla temperant, et vana a scelestis, dicta a maleficiis differunt, est locus sententiae, per quam neque huic delictum impune sit, et nos clementiae simul ac severitatis non paeniteat. Saepe audivi principem nostrum conquerentem, si quis sumpta morte misericordiam eius praevenisset. Vita Lutorii in integro est, qui neque servatus in periculum rei publicae neque interfectus in exemplum ibit. Studia illi, ut plena vecordiae, ita inania et fluxa sunt; nec quicquam grave ac serium ex eo metuas, qui suorum ipse flagitiorum proditor non virorum animis sed muliercularum adrepit. Cedat tamen urbe, et bonis amissis aqua et igni arceatur. Quod perinde censeo ac si lege maiestatis teneretur."

TERENCE.—*Heauton Timorumenos*, Prologue 22–42.

Tum quod maliuolus uetus poëta dictitat,
Repente ad studium hunc se adplicasse musicum,
Amicum ingenio fretum, haud natura sua:
Arbitrium uostrum, uostra existumatio
Valebit. qua re oratos uos omnis uolo,
Ne plus iniquom possit quam aequom oratio.
Facite aequi sitis: date crescendi copiam,
Nouarum qui spectandi faciunt copiam,
Sine uitiis; ne ille pro se dictum existumet,
Qui nuper fecit seruo currenti in uia
Decesse populum: quor insano seruiat?
De illius peccatis plura dicet, quom dabit
Alias nouas, nisi finem maledictis facit.
Adeste aequo animo: date potestatem mihi
Statariam agere ut liceat per silentium;
Ne semper seruos currens, iratus senex,
Edax parasitus, sycophanta autem impudens,
Auarus leno, adsidue agendi sint mihi
Clamore summo, cum labore maxumo.
Mea causa causam hanc iustam esse animum inducite,
Vt aliqua pars laboris minuatur mihi.

1. How did the Roman theatre differ from the Greek? Explain the following lines from Ovid:—

"Scena viget, studiisque favor distantibus ardet
Proque tribus resonant terna Theatra Foris."

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

2. Write an essay on the Terentian metres.

3. Give an account of the plot of the *Heauton Timorumenos.*

4. Write a list of the Roman Emperors from Augustus to Domitian in chronological order, with the dates of the principal events which occurred in this period.

5. Explain the words *cruppellarii, asylum, manceps,* and *editio.* How does Tacitus use the phrase *adeo non ?*

6. Mention some instances in which coins illustrate Palaeography.

THIRD YEAR'S AND SENIOR LATIN CLASSES, 1869.

Translate into Elegiac verse—

O liberty ; the prisoner's pleasing dream,
The poet's muse, his passion, and his theme ;
Genius is thine, and thou art Fancy's nurse ;
Lost without thee th' ennobling powers of verse ;
Heroic song from thy free touch acquires
Its clearest tone, the rapture it inspires :
Place me where winter breathes his keenest air,
And I will sing, if Liberty be there :
And I will sing at Liberty's dear feet,
In Afric's torrid clime, or India's fiercest heat.

Translate into Latin prose—

The soul, considered abstractedly from its passions, is of a remiss and sedentary nature, slow in its resolves, and languishing in its executions. The use, therefore, of the passions is to stir it up, and put it upon action, to awaken the understanding, to enforce the will, and to make the whole man more vigorous and attentive in the prosecution of his designs. As this is the end of the passions in general, so it is particularly of ambition, which pushes the soul to such actions, as are apt to procure honor and reputation to the actor. But if we carry our reflections higher, we may discover further ends of Providence in implanting this passion in mankind.

SENIOR LATIN CLASS.

Translate—

VIRGIL.—*Eclogues,* II., 45—62.

Huc ades, o formose puer : tibi lilia plenis
Ecce ferunt Nymphae calathis ; tibi candida Nais,
Pallentes violas et summa papavera carpens,
Narcissum et florem iungit bene olentis anethi ;
Tum, casia atque aliis intexens suavibus herbis,
Mollia luteola pingit vaccinia caltha.
Ipse ego cana legam tenera lanugine mala
Castaneasque nuces, mea quas Amaryllis amabat ;
Addam cerea pruna : honos erit huic quoque pomo.
Et vos, o lauri, carpam et te, proxima myrte :
Sic positae quoniam suaves miscetis odores.
Rusticus es, Corydon ; nec munera curat Alexis,
Nec, si muneribus certes, concedat Iollas.
Heu heu, quid volui misero mihi ? floribus Austrum
Perditus et liquidis immisi fontibus apros.
Quem fugis, ah, demens ? habitarunt di quoque silvas
Dardaniusque Paris. Palles, quas condidit arces,
Ipsa colat ; nobis placeant ante omnia silvae.

CICERO.—*De Natura Deorum*, I., xvi. 43.

Cum pöetarum autem errore coniungere licet portenta magorum Aegyptiorumque in eodem genere dementiam, tum etiam vulgi opiniones, quae in maxima inconstantia veritatis ignoratine versantur. Ea qui consideret quam inconsulte ac temere dicantur, venerari Epicurum et in eorum ipsorum numero, de quibus haec quaestio est, habere debeat. Solus enim vidit primum esse deos, quod in omnium animis eorum notionem impressisset ipsa natura. Quae est enim gens aut quod genus hominum quod non habeat sine doctrina anticipationem quamdam deorum? quam appellat προλῆψιν Epicurus, id est, anteceptam animo rei quamdam informationem, sine qua nec intelligi quidquam nec quaeri nec disputari potest. Cuius rationis vim atque utilitatem ex illo caelesti Epicuri de regula et iudicio volumine accepimus.

1. Quote from Milton's Lycidas, some imitations of Virgil's *Eclogues*.
2. Describe the situation of Hybla, M. Aracynthus, and Fl. Oaxes.
3. Give an account of Virgil's life; confirm your statements by references to his writings.
4. What were the opinions of Thales, Anaxagoras, and Pythagoras, concerning the nature of the Deity?
5. Enumerate the books which Cicero wrote in the last two years of his life.

Translate into Latin :—

It is more difficult to avoid the snares of these men than to endure their arms.

Nearly all men's youthful opinions are gradually weakened.

Who would not praise this great philosopher's contempt for external things?

I am not the man to laugh at the Christians' contempt for the things of this life.

Translate into Alcaics :—

Now learn to adapt unusual measures to your songs, O Saxons, having suffered great affliction, and, your strings being changed, celebrate the joyous day.

Now it is fitting to add chaplets to the temples; now it is fitting that before all the altars both the people and the fathers should dedicate, with gratulations, their guileless vows, as monuments of dutiful affection.

Singing, "Hail, O best of princes! who to be called just and the father of your country in every age, shall be celebrated through the histories of prosperity."

JUNIOR LATIN CLASS.

Translate :—

LIVY, XXIII., 19.

Ceterum mitescente iam hieme educto ex hibernis milite Casilinum redit. Ubi quamquam oppugnatione cessatum erat, obsidio tamen continua oppidanos praesidiumque ad ultimum inopiae adduxerat. Castris Romanis Tib. Sempronius praeerat dictatore auspiciorum repetendorum causa profecto Romam. Marcellum et ipsum cupientem ferre auxilium obsessis et Vulturnus amnis inflatus aquis et preces Nolanorum atque Acerranorum tenebant, Campanos timentium, si praesidium Romanum abscessisset. Gracchus adsidens tantum Casilino, quia praedictum erat dictatoris, ne quid absente eo rei gereret, nihil movebat, quamquam quae facile omnem patientiam vincerent nuntiabantur a Casilino.

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

HORACE.—*Satires*, II., viii., 20–33.

Summus ego et prope me Viscus Thurinus et infra,
Si memini Varius, cum Servilio Balatrone
Vibidius, quos Maecenas adduxerat umbras.
Nomentanus erat super ipsum, Porcius infra,
Ridiculus totas simul absorbere placentas.
Nomentanus ad hoc, qui, si quid forte lateret,
Indice monstraret digito : nam cetera turba,
Nos, inquam, coenamus aves, conchylia, pisces,
Longe dissimilem noto celantia succum ;
Ut vel continuo patuit, quum passeris atque
Ingustata mihi porrexerat ilia rhombi.
Post hoc me docuit, melimela rubere minorem
Ad lunam delecta. Quid hoc intersit, ab ipso
Audieris melius.

1. Describe accurately the situation of Ithaca, Lucania, Nola, Praeneste, and Perusia.

2. Quote some passages in which Horace alludes to Pythagoras.

3. Give the derivation of *manifestus*, *mazonomus*, *benignus*, and *incolumis*.

4. What are the chief merits and defects of Livy, as an historian?

5. Compare Horace with the Roman satirists who succeeded him.

Translate into Latin :—

That you may be able to learn much, do not learn many things.

The truly wise man will never doubt that the soul is immortal.

I will not object to your banishing me.

I will not object to your all leaving the city.

It cannot be denied that the rational faculty should command the heart.

It cannot be that the mind is not immortal.

Translate into Latin elegiacs :—

The Epistle which thou readest is come to thee from that land
Where the broad Ister is added to the waters of the sea.
If life happens to thee with sweet health,
One part of my fortune remains fair.
Me here fighting with cold and with arrows,
And with my fate, the fourth winter wearies.

B. LEWIS, *Professor*.

MODERN LANGUAGES.

I.

Translate into French :—

Of the animals who live with man many things are worthy of being known, and the dog and the horse are those which are most faithful. We read that a dog fought against robbers to save his master, and, although pierced with wounds, would not leave the dead body, and prevented the birds and the wild beasts from touching it. Another dog in Epirus recognised the murderer of his master in the midst of an assemblage of people, and forced him to confess his crime by biting and barking at him. Volcatius, a noble Roman, returning in the evening from the country, was attacked by a robber, and was saved by his dog. The Senator Coelius, also, while lying lying sick at Placentia, was attacked by armed men, and was not wounded until they had killed his dog.

PLINY—*Natural History*.

II.

The indignation often manifested on beholding an act of cruelty to a poor dumb creature evinces a general feeling of pity and humanity. Cruelty to animals is ever blended with cruelty to human beings:—indeed, morally speaking, cruelty to animals is an indication of character almost worse than cruelty to man; the latter can protest, proclaim his wrongs, and defend himself, whilst there is a brutal hardness of disposition displayed in bullying and torturing defenceless creatures who can be wronged with impunity, which is a qualification for the worst crimes; on the other hand, a love of animals is generally characteristic of an amiable, humane, charitable nature. Cruelty to the brute creation should, therefore, be punished, in spite of any sneer about sentimentality, both in deference to our own dependents, and because it naturally leads to greater brutalities, and to crimes more serious. Cruelty is murder in the seed, and cowardice in power; and mercy: as it has so justly been said, is the shadow of the love of God; it is the sign and messenger of a happier world than this.

R. De Vericour.

1. Give the principal rules of the use of the subjunctive mood, and illustrate them by examples.
2. Translate into French the following sentences:—He is to read; I have just seen the Queen; you should have stopped.
3. Mention the principal writers of the age of Louis XIV.
4. What is the principal character of the works of Racine?
5. Give a summary of the *Britannicus* of Racine.
6. When did Lafontaine live, and what is the character of his writings?
7. State what you know of the pulpit eloquence in French literature.
8. What influence had the French language on the formation of the modern English?

R. De Vericour.

History.

1. Estimate the results of the Norman Conquest, and explain the nature of the Feudal system as introduced by William the Conqueror.
2. Give some account of the Anglo-Saxon Witenagemot, and the Anglo-Norman Great Councils. Trace the rise and progress of English Parliamentary Government.
3. Review the constitution of the States General and the "Parlements" of France. Compare both assemblies with the English Parliaments.
4. Discuss the policy of Queen Elizabeth in relation to Mary Queen of Scots.
5. What was the Petition of Right? Compare that measure with other instruments of English liberty.
6. State the claims urged by Louis XIV. in right of his wife.
   (*a.*) Claims upon portions of the Netherlands by right of Devolution.
   (*b.*) Claims upon the Spanish Throne.
7. What was the Triple Alliance?
8. Examine the arguments for and against the Treaty of Utrecht.
9. What were the Declaration of Rights and the Bill of Rights? Was there any important difference in the wording of those instruments?
10. What events gave rise to the French Revolution of 1789? What view of the Revolution was taken by Edmund Burke?

William Rushton, *Professor.*

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

ENGLISH LANGUAGE.

1. Describe the Roman invasions and occupation of Britain.
2. Give an account of the Anglo-Saxon invasions, with the dates. Whence did the invaders come, and where did they settle?
3. What language was introduced into England by the Normans? What were the effects of the Norman Conquest upon the language of the country?
4. When was French disused in the schools, and in the courts of law?

MILTON—*Paradise Lost*, Book I.

5. Analyse this passages:—

> Him the Almighty Power
> Hurled headlong flaming from the ethereal sky,
> With hideous ruin and combustion, down
> To bottomless perdition.

6. Comment upon the following passages:

(*a.*)
> Or if *Sion Hill*
> Delight thee more, and *Siloa's brook* that flowed
> *Fast by* the oracle of God; I thence
> Invoke thy aid to my adventurous song,
> That with *no middle flight* intends to soar
> Above the *Aonian mount*, while it pursues
> Things unattempted yet in *prose or rhime*,

(*b.*)
> The broad circumference
> Hung on his shoulders like the moon, whose orb
> Through optic glass the *Tuscan artist* views
> At evening from the top of *Fesolé*,
> Or in *Valdarno*, to descry new lands,
> Rivers, or mountains in her spotty globe.

(*c.*)
> Him the Ammonite
> Worshipt in *Rabba* and her watry plain,
> In *Argob* and in *Basan*, to the stream
> Of utmost *Arnon*. Nor content with such
> Audacious neighbourhood, the wisest heart
> Of Solomon he led by fraud to build
> His temple right against the temple of God
> On *that opprobrious hill*.

7. Analyse this passage:—

SHAKESPEARE—RICHARD III.

> Now is the winter of our discontent
> Made glorious summer by this sun of York.

8. Explain the following passages:—

(*d.*) Peace, Master Marquis, you are *malapert*:
Your *fire-new* stamp of honour is scarce yet current.

(*e.*) *Marry*, as for Clarence, he is well repaid;
He is *franked up* to fatting for his pains.

(*f.*) I could have given *my uncle's grace* a *flout*
To *touch his growth* nearer than he touched mine.

(*g.*) First he *commends him* to your noble self;
Then *certifies* your lordship, that this night
He dreamt *the boar* had *rased* off his *helm*.

WILLIAM RUSHTON, *Professor.*

English Language.

1. Paraphrase the following passages:—

(*a.*) Thanne longen folk to gon on pilgrimages,
And palmers for to seeken straunge strondes,
To ferne halwes, kouthe in sondry londes;
And specially from every schires ende
Of Engelond, to Canterbury they wende,
The holy blisful martir for to seeke,
That hem hath holpen whan that they were seeke.

(*b*). There was also a Nonne, a Prioresse,
That of hire smylyng was ful symple and coy;
Hire grettest oothe nas but by seynt Loy;
And sche was clept Madame Englentyne.
Ful wel sche sang the serviso-devyne,
Entuned in hire nose ful semyly;
And Frensch she spak ful faire and fetysly,
Aftur the scole of Stratford atte Bowe,
For Frensch of Paris was to hire unknowe.

Comment upon extract (*b*) in reference to the use of Norman-French in England.

2. Give some account of the Mirrour for Magistrates, and Sackville's Induction.

3. Review Spenser's *Faerie Queene*, and inquire whether there is a want of unity in that poem.

4. Trace the rise and progress of the European drama, explaining the terms *myracle*, *mystery*, and *morality*.

5. Examine the views held by the following critics of Shakespeare:—Ben Jonson, Dryden, Pope, Dr. Johnson, and Coleridge.

6. Write a brief account of Milton's life, with a sketch of his literary career.

7. Define the term *style*. What are the chief requisites of style? Illustrate your remarks from the writings of Edmund Burke.

8. Explain the following passages:—

(*c.*) For, sir,
It is as sure as you are Roderigo,
Were I the Moor, I would not be Iago.
In following him, I follow but myself;
Heaven is my judge, not I for love and duty,
But *seeming* so, for my peculiar end:
For when my outward action doth demonstrate
The native act and figure of my heart
In compliment extern, 'tis not long after
But I will wear my heart upon my sleeve
For daws to peck at: I *am not* what I *am.*

(*d.*) That you shall surely find him,
Lead to the *Saggitary* the *raised* search.

(*e.*) I am glad I have found this napkin:
. . . . I'll have the work *ta'en out,*
And give't Iago.

(*f.*) How comes it, Michael, *you are* thus *forgot.*

(*g.*) To do the act that might the *addition* earn
Not the world's mass of vanity could make me.

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

Second Year.

1. Prove Causs's theorems in spherical trigonometry. Show that if a spherical triangle have one side equal to $\frac{1}{6}$ of a great circle, and the product of the tangents of half the adjacent angles $= \frac{1}{2}$, the sides of the triangle will be in arithmetic progression.

2. Find an expression for the surface of a sphere included between two parallel planes. Show that a right cone whose vertex is at the centre of the sphere, and vertical angle $= \frac{2\pi}{3}$ divides the sphere into two portions whose ratio is 3 : 1.

3. Assuming De Moivre's theorem, prove that $\cos\theta + \sqrt{-1}\sin\theta = e^{\theta\sqrt{-1}}$. Sum $1 + x\cos\theta + \frac{x^2\cos 2\theta}{1.2} + \frac{x^3\cos 3\theta}{1.2.3} + \ldots$ to ∞.

4. Find the angle between two straight lines whose equations are given. If the angle between the axes be a, show that the angle between the lines $2y + 3x\cos a = 0$, $2y\sin^2 a - x\cos a = 0$, is $2a$.

5. Find the locus of the middle points of a series of chords of a parabola $y^2 = 4ax$, parallel to the line $y = x\tan\beta$. If this locus meet the curve in P prove also that $SP = \frac{a}{\sin^2\beta}$.

6. Find the focal polar equation of the tangent at any point to an ellipse. If a focal chord PSP′ of a conic be bisected in M, and a line be drawn through M perpendicular to the major axis to meet the curve in Q, show that $2SQ = PP'$.

7. Define conjugate points of a hyperbola, and show that if P, D be two such points $CP^2 - CD^2 =$ constant, C being the centre of the curve.

8. Having given $\phi(x, y) = 0$, show how to find $\frac{dy}{dx}$, $\frac{d^2y}{dx^2}$.

Find $\frac{dy}{dx}$ having given—

1. $y = \sin^{-1} a^x$

2. $y = \frac{4x^3 - 3x}{(1-x^2)^{\frac{3}{2}}} + 3\tan^{-1}\left\{\frac{x}{\sqrt{1-x^2}}\right\}$.

3. $y = ae^{-\sqrt{\frac{a}{y}}}$

9. State and prove Taylor's theorem.

10. The portion of the tangent to an ellipse intercepted between the auxiliary circle, when a maximum, is equal to the distance between the foci. Prove this.

11. Investigate a method for finding the asymptotes of an algebraic curve, $\phi(x, y) = 0$. Point out clearly in what way the method will include the cases where the asymptotes are parallel to either axis. Find those of the curve $xy(y - 2x) = a(y^2 + 4x^2)$.

12. Evaluate—

(1). $\int \frac{\sin\left(x - \frac{\pi}{3}\right)dx}{\cos\left(x - \frac{\pi}{4}\right)}$ (2). $\int \frac{dx}{1 + e^x + e^{2x}}$. (3). $\int_1^{\frac{1}{\sqrt{2}}} \cos^{-1}x.\, x^3\sqrt{1 - x^2}\, dx$.

13. Find the length of the arc of a given curve between two given points. Show that the length of the curve $\sqrt{x} + \sqrt{y} = \sqrt{a}$ between the axes of x and y is $a\{1 + \frac{1}{\sqrt{2}}\log(1 + \sqrt{2})\}$.

The last part of question 13 is not included in the pass paper.

First Year's Mathematics.

1. Prove that parallelograms on the same base and between the same parallels are equal.

2. Describe a square that shall be equal to a given rectilineal figure.

3. How does Euclid define a tangent to a circle? Draw a tangent to a circle from an external point. What is the general definition of a tangent? From it deduce some fundamental properties of lines touching circles.

4. Prove that triangles and parallelograms of the same altitude are to each other as their bases.

5. If AD, BE, CF, be the perpendiculars from the angles of a triangle on the opposite sides, and O the centre of the circumscribing circle; show that the angles EDF, BOC are supplementary.

6. Define a fraction and explain what is meant by the multiplication of two fractions. If a, b, c, d be all integers, prove that $\frac{a}{b} \times \frac{c}{d} = \frac{c}{d} \times \frac{a}{b}$.

7. Prove that $(y^2 - zx)(z^2 - xy) + (z^2 - xy)(x^2 - yz) + (x^2 - yz)(y^2 - zx) + \frac{1}{2}(xy + xz + yz)\{(x-y)^2 + (y-z)^2 + (z-x)^2\} = 0.$

8. State, with the lemmas on which it is founded, the rule for finding the G. C. M. of two algebraic expressions.

Find the G. C. M. of $x^4 - 4x^3 + 27$ and $x^5 + 11x^3 - 54$, and add $\frac{1}{x+a+b}$, $\frac{b}{(a-b)(x-a+b)}$, $\frac{a}{(b-a)(x-b+a)}$.

9. Solve the equations—

1. $\frac{3-2x^2}{(x+2)(x+3)} + \frac{x^2+2}{(x+3)(x+1)} + \frac{2x^2+1}{(x+1)(x+2)} = 1.$

2. $4x^2 = (a-x)^2 + \frac{3}{4}(a^2 - x^2).$

10. Define harmonical progression, and show that the arithmetic, geometric, and harmonic means between two quantities are in continual proportion.

If a, b, c, are in H.P., show that $c-b$, $c-a$, c are also in H.P.

11. Prove the binomial theorem for a positive integral index. Find the last term but 3 in the expansion of $(2-x)^{13}$ in powers of x.

12. Find $\sqrt[7]{225}$ having given $\log_{10} 2 = \cdot 3010300$, $\log_{10} 3 = \cdot 4771213$ $\log_{10} 21678 = 4 \cdot 3360192$, $\log_{10} 21679 = 4 \cdot 3360392$.

13. Prove the formulæ—

1. $\sin \overline{A - B} = \sin A \cos B - \cos A \sin B.$

2. $\cos A - \cos B = 2 \sin \frac{B-A}{2} \sin \frac{B+A}{2}.$

14. If $\cos \alpha + \cos \beta + \cos \gamma + \cos \alpha \cos \beta \cos \gamma = 0$, prove that $\tan \frac{\alpha}{2} \tan \frac{\beta}{2} \tan \frac{\gamma}{2} = \pm 1$.

15. Given in a triangle two sides and the included angle, solve the triangle (giving the result in a form adapted to logarithmic calculation). If one angle $= 30°$ and the ratio of the squares on the adjacent sides $= 1:3$, find the other angles.

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

THIRD YEAR.

1. Find the equation to a plane in terms of the perpendicular from the origin and the angles which it makes with the axes.

2. Through the four angles of a face of a rectangular parellelopiped planes are drawn perpendicular to the diagonals of the parallelopiped which pass respectively through the angles, find the perpendicular from the intersection of three of these planes on the fourth.

3. Prove that the right line which is the shortest distance between two non-intersecting right lines is perpendicular to each.

Thence prove that, by properly choosing the axes, two lines may always be put into the form—

$$\left.\begin{matrix} z=-c. \\ x\sin\alpha+y\cos\alpha=0 \end{matrix}\right\} \text{and} \left.\begin{matrix} z=c \\ x\sin\alpha-y\cos\alpha \end{matrix}\right\} =0.$$

4. Thence deduce that, if a series of lines be drawn cutting two straight lines and equally inclined to the shortest distance between them, the locus of their middle points is an ellipse whose $(\text{eccentricity})^2 = \frac{\cos 2\alpha}{\cos^4\alpha}$; 2α being the acute angle between the lines.

5. Show that all parallel sections of a surface of the second degree are similar and similarly situated curves of the second degree.

6. Prove that the two generators of $\frac{x^2}{a^2}+\frac{y^2}{b^2}-\frac{z^2}{c^2}=1$, which lie in any plane, are parallel to the two lines in which the cone $\frac{x^2}{a^2}+\frac{y^2}{b^2}-\frac{z^2}{c}=0$ is cut by the parallel plane through the centre.

7. Define and investigate the equation to the elliptic paraboloid. Find also its circular sections.

8. Find an expression for the volume of a surface, and show how the limits of integration are to be supplied.

Find the volume of the slice cut off by the planes $z=y\tan\alpha$, $z=-y.\tan\alpha$ from the smaller of the two closed prisms formed by the intersection of the cylinders $y^2=\frac{b^2}{a^2}(2ax-x^2)$, $y^2=4a(a-x)$.

9. Show that if $\frac{du}{dx}\cdot\frac{dv}{dy}-\frac{du}{dy}\cdot\frac{dv}{dx}=0$ where u and v are functions of x and y, then $u=f(v)$; and prove also that there is only one solution of $Mdx+Ndy=0$ of the form $u=c$.

10. Solve these—

(1). $(x-a)(x-2a)\frac{dy}{dx}+ay=(x-a)^2(x-2a)\cos ax.$

(2). $\left(x\sin\frac{y}{x}-y\cos\frac{y}{x}\right)dx+x\left(1+\cos\frac{y}{x}\right)dy=0.$

(3). $y=x\frac{dy}{dx}+\left(\frac{dy}{dx}\right)^3.$

11. Investigate the solution of a linear differential equation with constant co-efficients.

Solve $\frac{d^3y}{dx^3}-2\frac{d^2y}{dx^2}-9\frac{dy}{dx}-6y=x^2+e^x$, it being given that the roots of $t^3-2t^2-9t-6=0$, are -1, -1, $2, \pm\sqrt{-3}$.

12. To what class of partial differential equations does Lagrange's rule apply. State and prove that rule.

Solve—

(1). $\tan x\frac{dz}{dx} + \tan y\frac{dz}{dy} = \tan z.$

(2). $(ax + by)\frac{dz}{dx} + (bx - ay)\frac{dz}{dy} = 0.$

C. NIVEN, *Professor.*

NATURAL PHILOSOPHY, APPLIED.

1. When any number of weights are raised through different heights, prove that the work expended is equal to the sum of all the weights multiplied by the height through which their common centre of gravity has been raised.

2. In what time would a 15 horse-power engine empty a shaft full of water, the diameter of the shaft being 8 feet, and the depth 200 fathoms?

3. Find the work expended in elongating a bar whose length is L, section K, modulus of elasticity E, and elongation l.

4. Investigate an expression for the equilibrium of a screw, taking into account the friction on the thread and the end.

5. A weight P, by descending an inclined plane, draws another weight Q, up a plane of the same inclination by means of a rope attached to the two weights; investigate the motion, and the tension of the rope, the co-efficient of friction being μ, and inclination of each plane θ.

6. An axle turns uniformly in a circular bearing under the action of a force P in a plane perpendicular to the axis; find the work expended against friction in one revolution.

7. Two balls, one weighing 10 lbs., the other 6 lbs., are fixed to the ends of a rod with their centres 3 feet apart; they revolve 100 times per minute about a vertical spindle whose distance from the centre of the heavier ball is 1 foot; find the pressure due to the centrifugal force.

8. What is meant by the centre of percussion of a body moving round an axis? how is its position found?

9. From what principles does De Pambour derive the theory of the steam engine?

10. What advantage is gained by working steam expansively?

11. Deduce an expression for the horse-power of an engine, in terms of the evaporation, the area of the piston, and velocity.

12. Show how a motion round any axis may be transferred to a motion round another which does not meet or is not parallel to the former; and determine the velocity ratio.

NATURAL PHILOSOPHY (SENIOR).

1. What is meant by the resultant of a number of forces—how can it be geometrically determined when all the forces act at the same point?

2. What force must be exerted to produce a pressure of one ton by a screw, the thread of which makes 150 turns in the height of 12 inches, the length of the arm being 6 feet?

3. Explain how the sensibility of a balance depends in the position of its centre of gravity.

4. State and explain accurately the meaning of Newton's second law of motion.

5. Find the velocity acquired by a heavy body in falling through a height of 1,000 feet.

6. Explain by means of a diagram the formation of an image by a spherical reflector.

Appendix B.

Selection of Examination Papers used at the Sessional Examinations.

7. Describe the solar microscope.
8. What is meant by polarized light?
9. Why is not the moon eclipsed at every opposition?
10. In what way does the refraction of the atmosphere affect the time of sunrise and sunset?
11. What is the greatest zenith distance of a star which never sets in latitude 51° 54′?
12. What are the proofs that the earth rotates on its axis?

Prize Questions.

1. Four bodies whose weights are 8, 12, 6, 16 lbs. are placed in the same straight line at distances of 6, 14, 18, and 20 feet from a fixed point in the same line. Find the position of their centre of gravity.
2. The arms of a bent lever are inclined at right angles; one is 2 feet in length, the other 4 feet; it is suspended from its angular point. Find the position of equilibrium.
3. Define the terms Kinetic energy and Potential energy, and prove that when a body is projected vertically upward with any given velocity the sum of its Kinetic and Potential energies is constant during its motion.
4. A heavy body attached to a flexible string is caused to revolve in a vertical circle; what is the least velocity it can have to describe a complete circle if the length of the string be 10 feet?
5. A body is projected in a horizontal direction from the summit of a plane whose inclination is 45°; where will it strike the plane if the velocity of projection be 100 feet per second?
6. A convex lens of air is formed by enclosing air between two watch-glasses, the radii of which are each twelve inches, what is the focal length of this lens when immersed in water, the refractive index from air to water being $\frac{4}{3}$?
7. Explain the construction of the terrestrial eye-piece.
8. Can objects be seen (without internal reflexion) through a prism whose refractive index is $\frac{3}{2}$, and refracting angle a right angle?
9. How are the actual lengths of the earth's polar and equatorial diameters ascertained?
10. At what time does a star whose right ascension is 5H. 45M. pass the meridian on the day of the autumnal equinox?
11. If the planets moved round the sun in concentric circles, show how to calculate at any time the apparent position of a planet?
12. On the same hypothesis prove the truth of Kepler's third law, assuming the law of universal gravitation.

NATURAL PHILOSOPHY (SENIOR).

1. How is the existence of obscure rays of heat shown in the solar spectrum?
2. How has the absolute dilatation of mercury been determined?
3. Distinguish between evaporation and ebullition; what is meant by saying that air is saturated with vapour?
4. How is the temperature of ebullition altered by pressure, by the presence of salts in solution, by the presence of air in solution?
5. Describe some form of self-registering thermometer.
6. Describe the nature of the aerial waves which produce sound, define the terms amplitude and length of wave.
7. What do you mean by the harmonic tones of a strained string, how are they produced?
8. Describe the Galvanometer, how is its construction altered according as it is intended to exhibit thermo or hydro-electric currents.

9. Enumerate the chief sources of electricity?

10. Explain some experiments by which the mutual repulsion of currents and magnets can be shown.

11. What do you mean by an induced current, how is it produced?

12. How would you give a gold leaf electroscope a charge of negative electricity?

Prize Questions.

1. What effect does an increase of pressure produce on the temperature of congelation?

2. Given the elastic force of vapour in the air; also its temperature and *absolute density*, how would you calculate the weight of it present in a given volume of air?

3. What is the relation between the latent heat and temperature of steam?

4. What peculiarities have been observed in the dilatation of crystals by heat?

5. What is Newton's law of cooling?

6. Point out the succession of *overtones* which can be got from a pipe open at both ends, and from one closed at one end.

7. How is the velocity of sound affected by the temperature and density of the gas through which it is propagated?

8. Describe the arrangement of a galvanic battery which you would adopt—1st, to produce the greatest intensity in a great external resistance; 2nd, in a comparatively feeble external resistance.

9. How would you ascertain if the axis of a dipping needle passed through its centre of gravity?

10. Describe Volta's condensing electroscope?

11. What is meant by the stratification of the electric light?

12. Describe the several parts of the induction coil.

NATURAL PHILOSOPHY (SENIOR).

1. How is the existence of obscure rays of heat shown in the solar spectrum?

2. How has the absolute dilatation of mercury been determined?

3. Distinguish between evaporation and ebullition; what is meant by saying that air is saturated with vapour?

4. How is the temperature of ebullition altered by pressure, by the presence of salts in solution, by the presence of air in solution.

5. Describe some form of self-registering thermometer.

6. Describe the nature of the aerial waves which produce sound, define the terms amplitude and length of wave.

7. What do you mean by the harmonic tones of a strained string, how are they produced?

8. Describe the Galvanometer, how is its construction altered according as it is intended to exhibit thermo or hydro-electric currents.

9. Enumerate the chief sources of electricity?

10. Explain some experiments by which the mutual repulsion of currents and magnets can be shown.

11. What do you mean by an induced current, how is it produced?

12. How would you give a gold leaf electroscope a charge of negative electricity?

Prize Questions.

1. What effect does an increase of pressure produce on the temperature of congelation?

2. Given the elastic force of vapour in the air, also its temperature

Appendix B. and *absolute density*, how would you calculate the weight of it present in a given volume of air?

Selection of Examination Papers used at the Sessional Examinations.

3. What is the relation between the latent heat and temperature of steam?

4. What peculiarities have been observed in the dilatation of crystals by heat?

5. What is Newton's law of cooling?

6. Point out the succession of *overtones* which can be got from a pipe open at both ends, and from one closed at one end.

7. How is the velocity of sound affected by the temperature and density of the gas through which it is propagated?

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9. How would you ascertain if the axis of a dipping needle passed through its centre of gravity?

10. Describe Volta's condensing electroscope?

11. What is meant by the stratification of the electric light?

12. Describe the several parts of the induction coil.

NATURAL PHILOSOPHY (JUNIORS).

1. Why do metals appear cold to the touch, when timber, wool, &c., at the same temperature, do not?

2. How is it shown that liquids are bad conductors of heat?

3. Why are metallic reflectors employed in reflecting heat in preference to the silvered glass used in the analogous experiments in reference to light?

4. In the ordinary balance the arms must be of equal length, and the centre of gravity below the fulcrum; assign the reasons for these arrangements.

5. Why is a pendulum used for regulating the rate of a clock?

6. A body when floating in water has 20 inches immersed, and in another liquid 26⅔; what is the specific gravity of that liquid?

7. What is meant by an achromatic lens? How is it constructed?

8. Explain the cause of the colours observed when a thin film of oil floats on water.

9. How is the electric light produced?

10. Explain the construction of some form of commutator for reversing galvanic currents.

11. Describe the thermo-pile.

12. How is it experimentally proved that sound is reflected according to the same law as light?

JOHN ENGLAND.

BOTANY AND ZOOLOGY.

1. State, in the order of their systematic value, the distinctive characters of Monocotyledons.

2. Explain precisely what is meant by the terms *superior* and *inferior*, as applied to the pistil.

3. Give examples of common British plants, with monadelphous stamens.

4. Define the order Crassulaceæ.

5. Give some account of the spores of the higher Cryptogams.

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6. Describe the nervous system of the encephalous Mollusks.

7. Compare the gills of Crustaceans with those of the higher Annelids.

8. Briefly contrast the orders Diptera and Hymenoptera, as to their (1) oral organs, (2) wings and (3) metamorphoses.

9. State, concisely, those characters which distinguish typical Fishes (Teleostei) from Batrachians.

10. What families of ungulate Mammals are absent from the recent fauna of Europe?

J. REAY GREENE, B.A., M.D.

GEOLOGY AND MINERALOGY.

1. What are the features which characterize Sedimentary rocks?

2. What are the characters of Plutonic rocks, and by what means are rocks of this class distinguished from Volcanic rocks?

3. What are the forms of Metamorphic rocks most abundant in Ireland; and where in this country do these rocks occur?

4. What is the position, and what is the nature of the group of rocks known as Laurentian?

5. Name some of the most characteristic of the Upper Llandovery fossils.

6. What forms of fossils are most abundant in the Carboniferous limestone?

7. To what geological horizon is the Stonesfield slate referable, and what important fossils have been obtained from those deposits?

8. In what formation do Cycloid and Ctenoid fishes first appear?

9. What is the position, and what is the nature of the deposits in Switzerland, known under the name of Nagelflue?

10. In what geological horizon do the Gypseous strata of Paris occur, and what fossils have been obtained from these strata?

11. What are the minerals which enter into the composition of the Connemara marble?

12. To what family of minerals is Agate referable, and under what circumstances does it usually occur?

13. To what system of crystals does the Beryl belong, and what are its characters and composition?

ROBERT HARKNESS.

CHEMISTRY.—PRIZE QUESTIONS.

N.B.—The name and faculty of each student are to be written on the first page of each book.

1. Illustrate the doctrine of atoms and of equivalents in the reaction of sodium on hydrochloric acid and on water.

2. Exhibit by diagrams the atomic and the molecular volumes of hydrogen, nitrogen, oxygen, phosphorus vapour, water, ammonia, and porphuretted hydrogen.

3. Indicate in symbols the atomicities of iron in ferrous and ferric oxides and chlorides; and of antimony in antimonious and antimonic oxides and chlorides.

4. How many cubic inches of oxygen should you obtain from 100 grains of potassic chlorate?

$$K = 39 : Cl = 35{\cdot}5$$

100 cub. in. of oxygen weigh 34·29 grains.

5. Prepare phosphorus in its two forms; contrast their properties. Convert ordinary phosphorus into glacial phosphoric acid. Write the formula of the acid according to its proper type.

6. Prepare fluoride of silicon, pass it into water, and add baryta to the solution; state the different reactions.

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Selection of Examination Papers used at the Sessional Examinations.

7. Point out the distinction between the salt of a dibasic acid and of a real double salt. Give examples.

8. From what compounds of magnesium would you deduce its atomicity? Prepare the metal, and state some of its properties.

9. Mention those volatile elements which have anomalous vapour volumes.

10. The processes of oxidation and of de-oxidation are illustrated by passing chlorine and afterwards sulphuretted hydrogen into ferrous sulphate; represent the reactions in symbols. Prove by chemical tests the changes which take place.

11. Explain the principles of the American mode of extracting silver from its ores. With what metals is it isomorphous?

12. State the arguments for adopting Hg_2Cl_2 instead of HgCl as the formula for mercurous chloride or calomel.

13. Point out the difference between a homologous and a heteralogous series? Give examples in symbols of both series.

14. Illustrate by formulæ the different compounds which a polybasic acid may produce by reaction with a monatomic alcohol.

15. Classify the compound ammonias derived from the monatomic alcohols. Give their general formula, and the process for their preparation.

16. Describe the amides. How are they prepared?

J. BLYTH, M.D., *Professor.*

CHEMISTRY.

Pass Questions.

N.B.—The name and faculty of each student are to be written on the first page of each book.

Answers to any twelve questions will be regarded as sufficient for the Pass Examination.

1. Water is decomposed by the galvanic battery; state the poles at which each gas is evolved. Give the volumes of each gas, and mark their atomicities.

2. Give examples of the synthesis of some non-metallic compounds.

3. Pass one volume of carbonic anhydride over red hot charcoal; state the composition in equivalents, the volume and the properties of the gas produced.

4. Oxide of copper and carbon are heated together; give the formula, atomic weight, and the properties of the gas produced. Give some other modes of preparing the same gas.

5. Nitrogen is a pentad, but in ammonia it is a triad; represent this by a diagram.

6. Chlorine is passed into a solution of ammonia; explain the reactions, and give the properties of the gas produced.

7. Write out the formulæ of phosphoric and of nitric anhydride, and of the hydrated acids; of anhydrous oxides of sodium and zinc, and of the hydrated oxides; of ferrous and of ferric oxides, and of their corresponding chlorides.

8. Prepare iodine. How would you detect its presence in a solution of iodide of potassium?

9. Prepare caustic potash; write the formula of its hydrate on the water type.

10. Give the best tests for the oxides of iron, copper, mercury, lead, and silver.

11. Explain the meaning of the term water of crystallization. Give examples.

12. Point out which of the following oxides are isomorphous, ferrous, and ferric oxides, oxides of aluminium, magnesium, potassium, and silver.

13. Explain the nature of salts. Give examples of normal and of basic and acid salts.

14. Prepare the two oxides of mercury. Give their formulæ.

15. The alums are double salts; explain the meaning of the term. Write the general formula of the alums.

16. How is zinc extracted from the carbonate?

17. Describe some of the properties of metallic platinum when in a fine state of division.

18. Explain the process for estimating nitrogen in organic compounds by converting it into ammonia.

19. Five grains of an organic substance are burnt with oxide of copper; the chloride of calcium tube weighs after the combustion 226 grains, and before it 223 grains; calculate the per-centage of hydrogen contained in the substance.

20. What is meant by typical hydrogen?

21. Prepare common ether.

22. Give examples of some monatomic alcohols; exhibit the type on which they are formed.

23. What are the aldehydes?

24. Write the formula of ethylamine as a compound ammonia.

J. BLYTH, M.D., *Professor.*

ANATOMY AND PHYSIOLOGY.

1. What is the average per-centage of carbonic acid in expired air, and what are the circumstances which affect its rate of production?

2. State the nature and composition of lymph and chyle?

3. What are the microscopic features of adipose tissue?

4. What are the microscopic features of cartilaginous tissue?

5. What are the structures entering into the coats of an artery, and how are they disposed?

6. Describe the structure and office of aortic valves.

7. Afford proof of the independent power of the spinal cord, and explain the nature of the reflex function.

8. Describe the structure, relations, and connexions of the diaphragm, mentioning its vessels and nerves.

9. Describe the optic tracts, commissure, and nerves.

10. Describe the relations of the stomach; mention the disposition of its coats, its vessels, and nerves.

11. Describe the choroid coat of the eye; also the ciliary ligament and processes.

12. Describe the connexions and structure of the crystalline lens.

PRACTICAL ANATOMY.

1. Describe the articular extremities of the humerus, radius, and ulna, mentioning the ligaments connected with these bones.

2. Describe the origin, insertion, relations, and action of the supinator radii longus muscle.

3. Describe the origin, insertion, relations, and action of the peroneus longus muscle.

4. Describe the course and several relations of the femoral artery from Poupart's ligament to its arrival in the popliteal space.

5. Describe the origin, course, and relations of the left subclavian artery.

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Selection of Examination Papers used at the Sessional Examinations.

6. State the origin, course, relations, and branches of the obturator nerve.

7. State the attachments of the obturator fascia, and of the obturator membrane; describe the origin, insertion, and relations of the obturator internus muscle.

8. Describe the origin, course, stages, and relations of the external carotid artery—mention the names of its branches.

J. H. CORBETT.

PRACTICE OF MEDICINE.

1. *a.* Describe a paroxysm of intermittent fever.
   b. How are the different types distinguished?
   c. What circumstances favour the spread of the disease?
2. What circumstances would induce you to give stimulants in fever?
3. How would you explain the existence of local congestion in fever?
4. What are the symptoms and causes of pæymia?
5. How are diseases of the brain connected with those of the heart?
6. What causes cerebral disease to be more common in childhood and old age than in middle life?
7. Describe a case of diphtheria, and the immediate causes of its fatality.
8. What organs are relatively most affected in measles and scarlatina?
9. What is the immediate cause or causes of death in Bright's disease?
10. What are the general symptoms, physical signs, and pathological appearances in a case of abortive tubercle.
12. Give the general symptoms of peritonitis.
13. What is the connexion as to cause and effect between liver diseases and climate and season?
14. What are the symptoms and pathology of ileus?

DENIS CHARLES O'CONNOR.

SURGERY.

1. Describe the phenomena of inflammation and the changes which take place in the vessels, and in the blood.
2. How would you distinguish hectic from traumatic fever?
3. How would you treat cellulo-cutaneous erysipelas, in its different stages?
4. Explain the surgical treatment of arterial hæmorrhage.
5. What are the characters of gunshot wounds, the nature and force of the different projectiles, their effects, and treatment?
6. Describe the different methods of treating fractures.
7. Describe the pathology of traumatic encephalitis, and of contusion of the brain.
8. What is an embolon, and what effects may it produce?
9. What are the indications for excision of the knee, and of the elbow joints? Describe the operations.
10. What are the symptons of stone in the bladder, and what are the circumstances which should determine you to select the operation of lithotomy, or lithotrity, for its cure? Describe each.
11. To what conclusions has Monsieur Ricord arrived, from the effects of syphilitic inoculation?

PROFESSOR TANNER.

FACULTY OF MEDICINE.

1. Describe the properties and action of foxglove; give its Latin name, preparations, indications, contra-indications, and doses.
2. Same particulars with regard to gentian.

3. How are quinia, cinchonia, and quinidia distinguished from each other?

4. How do tartar emetic and sulphate of zinc differ in action as emetics?

5. What are the doses of laudanum, castor oil, turpentine, and nitre?

6. How does hyosciamus differ from opium as a narcotic?

Prize Questions.

1. What are the indications for the use of diuretics?

2. Contrast the use of tonics with that of stimulants.

3. How can the constitution of the blood be modified by medicinal agents?

4. How do sedatives act, and what is the result of such action?

Examiner, Professor PURCELL O'LEARY.

MIDWIFERY.

1. Describe the hymen in the human female; its structure, extent, and relations; what abnormal conditions of it are occasionally found; and what ill consequences results from these?

2. What is the smallest measurement of a pelvis through which an average sized living child can be born at term? In what direction is the pelvis most commonly contracted?

3. How is the membrana decidua formed; and what are its offices? Where is it found besides on the inner surface of the uterus?

4. Mention the distinctive characters of the egg of an oviparous and of a viviparous animal respectively. How are the form and size of the oviduct influenced by these characters?

5. At what period of utero-gestation is retroversion of the gravid uterus likely to occur? How is it caused; and what is the treatment required?

6. Describe in detail the mode of making a vaginal examination. On what points is information to be sought for in the first stage of labour, and on what in the second?

7. A woman is in labour of her third child, her previous labours having been natural; the cord has prolapsed, but is still pulsating; how would you manage the case? What would be your treatment if the cord was cold, and all pulsation had ceased for the last hour?

8. In a labour in which the head has advanced so far as to rest on the floor of the perinæum, and it is now deemed advisable to deliver with the forceps, describe minutely the various steps of the operation.

9. What are the circumstances which call for the induction of premature labour? How is it performed, and what are the considerations which should determine the time at which labour should be brought on?

10. The breasts, after confinement, are liable to become distended and painful, so that the child cannot draw them; how would you guard against this state of things; and how would you treat it if already existing?

J. (R.) HARVEY, A.B., M.D., *Professor of Midwifery.*

MEDICAL JURISPRUDENCE.

1. In a case of an alleged criminal assault, on a child under ten years of age, what are the signs on which you would chiefly rely, if the examination has been delayed for some time? Point out the fallacies to be guarded against.

Appendix B

Selection of Examination Papers used at the Sessional Examinations.

2. On what signs would you chiefly rely to prove that suspension has taken place before, and not after death, in a case of suspected hanging.

3. In the examination of contused and incised wounds on a person found dead, state all the points to which attention must be directed, and the inferences to be drawn from them.

4. State some of the circumstances by which the appearance and the course of cadaveric rigidity may be affected.

5. Describe Stas' method for extracting a volatile vegetable alkaloid like coniine from the contents of the stomach.

6. Describe the symptoms of large and moderate doses of oxalic acid when given as a poison. Give the mode of extracting it from the contents of the stomach, supposing magnesia to have been administered as an antidote.

J. BLYTH, M.D.

MEDICAL JURISPRUDENCE.

1. What are the two principal conditions precedent to the reception of testimony by our legal tribunals? Give an instance in which the sanction of an oath is dispensed with, and for what reason in the trial of one charge exclusively.

2. What is the object of the "re-examination" of a witness, and how should it be conducted?

3. Has a medical witness, as such, any privilege exempting him from the involuntary disclosure of statements confidentially made to him by a patient?

4. What is the presumption of law when a homicide has taken place? and what is necessary to be proved on behalf of the person charged with the commission of it?

5. To constitute the crime of murder, within what space of time from the infliction of the injury must the death have ensued? Upon an indictment for murder by poison must the kind of poison used be specifically proved?

6. Distinguish between the meaning in law of a "wound," a "maim," and a "grievous bodily harm."

7. In order to sustain a defence on the ground of insanity of the accused, what must be proved? Is the doctrine of "homicidal monomania" recognised by our law as a justification?

8. Of what offence is an apothecary or chemist who negligently supplies a wrong drug, in consequence of which death ensues, guilty in law.

9. What may be regarded as an insurable life?

10. What is a "testable capacity?" What in general is the best criterion of its existence, and how should the weight of medical opinion as to it be mainly determined?

11. What are the legal requisites of the medical certificate to justify the confinement of a person in a lunatic asylum?

12. What precaution should witnesses observe to entitle them to refer to written memoranda while giving testimony for the purpose of assisting or refreshing their memory?

PROFESSOR BARRY, *Examiner.*

APPENDIX C.

List of the Students who obtained Honors or Prizes at the Sessional Examinations.

List of Students who obtained Prizes or Honors at the Sessional Examinations 1868–69.

Greek (Third Year).
Michael Finucane, . . 1st.
Henry Heazle, . . . 2nd.

Greek (Senior).
Daniel Wilson, . . } 1st.
Walter Dunn, . . }
Henry Paul, . . } 3rd.
Charles Harvey, . . }
John Kepple, . . }
William Tivy, . . . 6th.

Greek (Junior).
William Blyth, . . } 1st.
Charles M'Cartie, . . }
William Bradley, . . }
Ludlow T. Colthurst, . . } 4th.
Percy Johnson, . . }

Latin (Third Year).
Michael Finucane, . . 1st.
Henry Heazle, . . . 2nd.

Latin (Senior).
Walter Dunn, . . . 1st.
Daniel Wilson, . . . 2nd.

Latin (Junior).
William D. Blyth, . . 1st.
Charles M'Cartie, . . 2nd.
William D. Bradley, . . 3rd.

Mathematics (First Year).
Charles M'Cartie, . . 1st.
Henry Haycroft, . . 2nd.
Berkely Gale, . . . 3rd.

History.
John Chestnut, . . . 1st.

English Literature.
John Chestnut, . . . 1st.
Michael Finucane, . . 2nd.
James Magill, . . . 3rd.

English Language.
William Bradley, . . 1st.
William D. Blyth, . . 2nd.

Natural Philosophy.
John J. Blackall, . . 1st.
Henry T. Madden, . . 2nd.

Applied Mechanics.
James Moran, . . . 1st.
Benjamin Parkes, . . 2nd.

French (Senior) Medical.
Thomas B. Whitten, . . 1st.
John F. Dale, . . . 2nd.
George Armstrong, . } 3rd.
John J. Collis, . . }

French (Senior) Arts and Engineering.
William D. Blyth, . . 1st.
William Bradley, . . 2nd.
Joseph O'Sullivan, . . 3rd.

French (Junior).
John B. Clarke, . . . 1st.

Geology and Mineralogy.
Berkely Gale, . . . 1st.
John B. Clarke, . . . 2nd.

Chemistry.
James Magill, . . . 1st.
Henry Madden, . . . 2nd.
John E. Collis, . . . 3rd.
John Chestnut, . . . 4th.
Berkely Gale, . . } 5th.
Thomas Whitten, . . }

Natural History.
James Magill, . . . 1st.

Metaphysics.
Michael Finucane, . . 1st.

Political Economy.
John Chestnut, . . . 1st.

Logic.
Daniel Wilson, . . . 1st.

Engineering (3rd year).
Benjamin Parkes, . . 1st.
James Moran, . . . 2nd.

Engineering (2nd year.)
Exham Phillips, . . . 1st.
Robert Julian, . . } 2nd.
Francis Fair, . . }

Engineering (1st Year).
Henry Haycroft, . . . 1st.
Berkely Gale, . . . 2nd.

Engineering (Office Work).
Charles Bolton, . . . 1st.
Exham Phillips, . . . 2nd.

Anatomy and Physiology (1st year).
John J. Blackall, . . 1st.
John J. Collis, . . . 2nd.

Anatomy and Physiology (2nd year).
Francis Tuohy, . . . 1st.
John Burke, . . . 2nd.
George Vickery, . . . 3rd.
Bernard O'Connor, . . 4th.
Joseph Wilson, . . . 5th.

Materia Medica.
Francis Tuohy, . . . 1st.

Practical Chemistry.
Benjamin Derham, . . 1st.
Francis Tuohy, . . } 2nd.
George Vickery, . . } equal.
John Burke, . . . 4th.
Robert Tedbury, . . . 6th.

Practical Anatomy (2nd year).
John Burke, . . . 1st.
Francis Tuohy, . . . 2nd.
Richard Ryan, . . . 3rd.

Practical Anatomy (3rd year).
Samuel Hawkes, . . 1st.
Redmond Lee, . . . 2nd.
James Holland, . . . 3rd.

Surgery.
Daniel Martin, . . . 1st.
John O'Neill, . . . 2nd.

Medical Jurisprudence.
Alexander S. Merrick, . 1st.
Matthew D. O'Connell, . 2nd.

Midwifery.
James C. Holland, . . 1st.
Redmond Lee, . . . 2nd.
John O'Neill, . . . 3rd.
Samuel Hawkes, . . . 4th.

Practice of Medicine.
Alexander S. Merrick, . 1st.
Matthew D. O'Connell, . 2nd.

Appendix D.

APPENDIX D.

Examination Papers for Scholarships.

SELECTION OF PAPERS OF QUESTIONS USED AT THE SCHOLARSHIP EXAMINATIONS.

GREEK PROSE.—SENIOR CLASSICAL SCHOLARSHIP.

Translate :—

(A.)—PLATO—*Republic*, 607. B.

Ταῦτα δή, ἔφην, ἀπολελογίσθω ἡμῖν ἀναμνησθεῖσι περὶ ποιήσεως, ὅτι εἰκότως ἄρα τότε αὐτὴν ἐκ τῆς πόλεως ἀπεστέλλομεν τοιαύτην οὖσαν· ὁ γὰρ λόγος ἡμᾶς ἔρει. προσείπωμεν δὲ αὐτῇ μὴ καί τινα σκληρότητα ἡμῶν καὶ ἀγροικίαν καταγνῷ, ὅτι παλαιὰ μέν τις διαφορὰ φιλοσοφίᾳ τε καὶ ποιητικῇ· καὶ γὰρ "ἡ λακέρυζα πρὸς δεσπόταν κύων ἐκείνη κραυγάζουσα," καὶ "μέγας ἐν ἀφρόνων κενεαγορίαισι," καὶ "ὁ τῶν διασόφων ὄχλος κρατῶν," καὶ "οἱ λεπτῶς μεριμνῶντες ὅτι ἄρα πένονται," καὶ ἄλλα μυρία σημεῖα παλαιᾶς ἐναντιώσεως τούτων. ὅμως δὲ εἰρήσθω, ὅτι ἡμεῖς γε, εἴ τινα ἔχοι λόγον εἰπεῖν ἡ πρὸς ἡδονὴν ποιητικὴ καὶ ἡ μίμησις, ὡς χρὴ αὐτὴν εἶναι ἐν πόλει εὐνομουμένῃ, ἄσμενοι ἂν καταδεχοίμεθα, ὡς ξύνισμέν γε ἡμῖν αὐτοῖς κηλουμένοις ὑπ' αὐτῆς· ἀλλὰ γὰρ τὸ δοκοῦν ἀληθὲς οὐχ ὅσιον προδιδόναι. ἦ γάρ, ὦ φίλε, οὐ κηλεῖ ὑπ' αὐτῆς καὶ σύ, καὶ μάλιστα ὅταν δι' Ὁμήρου θεωρῇς αὐτήν; Πολύ γε. Οὐκοῦν δικαία ἐστὶν οὕτω κατιέναι, ἀπολογησομένη ἐν μέλει ἢ τινι ἄλλῳ μέτρῳ; Πάνυ μὲν οὖν.

1. What is the main argument of the Republic of Plato, and what the special subject of the tenth book? Upon what grounds does he exclude poets from his political system?

2. Give a rapid sketch of the schools of Greek Philosophy from the age of Socrates to that of Cicero.

(B.) Re-translate into Greek :—

"That being the case, does any of these bring about the dissolution and destruction of the soul? Turn it over well in your mind, that we may not be misled by supposing that when the crimes of the unjust and foolish man are found out, he is destroyed by his injustice, which is a depraved state of the soul. No, consider the case thus. The depravity of the body, that is to say, disease, wastes and destroys the body, and reduces it to a state in which it ceases to be a body; and all the things, which we named just now, are brought by their own proper vice, which corrupts them by its adhesion or indwelling, to a state in which they cease to exist. I am right, am I not?—Yes.

Then proceed to examine the soul on the same method. Is it true that, when injustice and other vices reside in the soul, they corrupt and wither it by contact or indwelling, until they have brought to death and severed it from the body?—Certainly, they do not produce that effect."

(C.) Translate into Greek :—

I have listened to you patiently and without interruption. Now listen to me. You complain of the scepticism of the age. This is one form in which the philosophic spirit of the age presents itself. Let me tell you that another form which it assumes is that of poetic reverie. Plato of old had dreams like these, and the Mystics of the Middle Ages; and still their disciples walk in the cloud-land and dream-land of this poetic philosophy. Pleasant and cool upon their souls lie the shadows of the trees under which Plato taught. From their whispering leaves comes wafted across the noise of populous centuries a solemn and mysterious sound, which to them is the voice of the soul of the world.

GREEK PROSE.—JUNIOR SCHOLARSHIPS OF THE SECOND YEAR.

(A.)—Translate :—

DEMOSTHENES—*Olynthiac Orations.*

1. *α. πολλὴν δὴ τὴν μετάστασιν καὶ μεγάλην δεικτέον τὴν μεταβολήν, εἰσφέροντας, ἐξιόντας, ἅπαντα ποιοῦντας ἑτοίμως, εἴπερ τις ὑμῖν προσέξει τὸν νοῦν.*

Could the construction of this sentence be altered?

b. πρότερον μὲν γὰρ, ὦ ἄνδρες Ἀθηναῖοι, εἰσεφέρετε κατὰ συμμορίας, νυνὶ δὲ πολιτεύεσθε κατὰ συμμορίας. ῥήτωρ ἡγεμὼν ἑκατέρων, καὶ στρατηγὸς ὑπὸ τούτῳ, καὶ οἱ βοησόμενοι τριακόσιοι.

Explain the technical and official terms in this sentence.

c. καὶ τὰ μὲν ἄλλα σιωπῶ, πόλλ' ἂν ἔχων εἰπεῖν, ἀλλ' ὅσης ἅπαντες ὁρᾶτε ἐρημίας ἐπειλημμένοι, καὶ Λακεδαιμονίων μὲν ἀπολωλότων, Θηβαίων δ' ἀσχόλων ὄντων, τῶν δ' ἄλλων οὐδενὸς ὄντος ἀξιόχρεω περὶ τῶν πρωτείων ἡμῖν ἀνταξασθαι, ἐξὸν ἡμῖν καὶ τὰ ἡμέτερ' αὐτῶν ἀσφαλῶς ἔχειν καὶ τὰ τῶν ἄλλων δίκαια βραβεύειν, ἀπεστερήμεθα μὲν χώρας οἰκείας, πλείω δ' ἢ χίλια καὶ πεντακόσια τάλαντα ἀνηλώκαμεν εἰς οὐδὲν δέον, οὓς δ' ἐν τῷ πολέμῳ συμμάχους ἐκτησάμεθα, εἰρήνης οὔσης ἀπολωλέκασιν οὗτοι, ἐχθρὸν δ' ἐφ' ἡμᾶς αὐτοὺς τηλικοῦτον ἠσκήκαμεν.

Explain the construction of ἐπελημμένοι and ἐξόν. Decline ἀξιόχρεω, and derive βραβεύειν.

d. ἀλλ', οἶμαι, παρόμοιόν ἐστιν ὅπερ καὶ περὶ τῆς τῶν χρημάτων κτήσεως· ἂν μὲν γὰρ ὅσα ἄν τις λάβῃ καὶ σώσῃ, μεγάλην ἔχει τῇ τύχῃ τὴν χάριν, ἂν δ' ἀναλώσας λάθῃ, συνανάλωσε καὶ τὸ μεμνῆσθαι τὴν χάριν. καὶ περὶ τῶν πραγμάτων οὕτως οἱ μὴ χρησάμενοι τοῖς καιροῖς ὀρθῶς, οὐδ' εἰ συνέβη τι παρὰ τῶν θεῶν χρηστὸν, μνημονεύουσι.

Distinguish between the different uses of ἄν in the first part of this sentence; and account for the difference in *mood* of the several verbs.

2. To what stage of the Attic dialect does the language of Demosthenes belong? Point out some of its variations from that of Thucydides.

3. Describe the positions of Olynthus and Amphipolis; and the state of political parties at Athens when the Olynthiac Orations were delivered.

(B.)—Translate:—

PLATO.—*Crito.*

Σκόπει τοίνυν, ὦ Σώκρατες, φαίεν ἂν ἴσως οἱ νόμοι, εἰ ἡμεῖς ταῦτα ἀληθῆ λέγομεν, ὅτι οὐ δίκαια ἡμᾶς ἐπιχειρεῖς δρᾶν ἃ νῦν ἐπιχειρεῖς. ἡμεῖς γάρ σε γεννήσαντες, ἐκθρέψαντες, παιδεύσαντες, μεταδόντες ἁπάντων ὧν οἷοί τ' ἦμεν καλῶν σοὶ καὶ τοῖς ἄλλοις πᾶσι πολίταις, ὅμως προαγορεύομεν τῷ ἐξουσίαν πεποιηκέναι Ἀθηναίων τῷ βουλομένῳ, ἐπειδὰν δοκιμασθῇ καὶ ἴδῃ τὰ ἐν τῇ πόλει πράγματα καὶ ἡμᾶς τοὺς νόμους, ᾧ ἂν μὴ ἀρέσκωμεν ἡμεῖς, ἐξεῖναι λαβόντα τὰ αὐτοῦ ἀπιέναι ὅποι ἂν βούληται. καὶ οὐδείς ἡμῶν τῶν νόμων ἐμποδών ἐστιν οὐδ' ἀπαγορεύει, ἐάν τέ τις βούληται ὑμῶν εἰς ἀποικίαν ἰέναι, εἰ μὴ ἀρέσκοιμεν ἡμεῖς τε καὶ ἡ πόλις, ἐάν τε μετοικεῖν ἀλλοσέ ποι ἐλθών, ἰέναι ἐκεῖσε ὅποι ἂν βούληται, ἔχοντα τὰ αὐτοῦ.

1. Explain fully the construction of the clause beginning ὅμως προαγορεύομεν and ending ὅποι ἂν βούληται, and of ὧν καλῶν in the preceding clause. Account for the difference in *mood* of βούληται and ἀρέσκοιμεν in the last clause.

2. Point out the connexion between the teaching of Socrates and the career of Alexander the Great?

3. Who were the most distinguished pupils of Socrates, and what are the main differences between the respective portraits they have left of their master?

(C.)—Translate into Greek:—

Every great man, especially under a democratical government and in a period of moral corruption, excites the envy of others; for it is the fate of the truly great to be envied by those who feel their own comparative inferiority. Even a superficial knowledge of the human heart shows how much we are inclined to envy those we cannot excel. Who does not remember the answer which that citizen of Athens gave to Aristides, when the latter asked him why he voted against him! If such a man be distinguished by his talents, others endeavour to degrade him, or if they do justice to his genius, speak in a derogatory manner of his feelings.

Appendix D.

Examination Papers for Scholarships.

GREEK.—SCHOLARSHIPS OF THE FIRST YEAR.

(A.) HERODOTUS—Book ii., c. 141.

Translate :—

Μετὰ δὲ τοῦτον βασιλεῦσαι τὸν ἱρέα τοῦ Ἡφαίστου, τῷ οὔνομα εἶναι Σεθών, τὸν ἐν ἀλογίῃσι ἔχειν παραχρησάμενον τῶν μαχίμων Αἰγυπτίων ὡς οὐδὲν δεησόμενον αὐτῶν, ἄλλα τε δὴ ἄτιμα ποιεῦντα ἐς αὐτοὺς, καί σφεας ἀπελέσθαι τὰς ἀρούρας, τοῖσι ἐπὶ τῶν προτέρων βασιλέων δεδόσθαι ἐξαιρέτους ἑκάστῳ δυώδεκα ἀρούρας. μετὰ δὲ ἐπ' Αἴγυπτον ἐλαύνειν στρατὸν μέγαν Σαναχάριβον βασιλέα Ἀραβίων τε καὶ Ἀσσυρίων· οὐκ ὦν δὴ ἐθέλειν τοὺς μαχίμους τῶν Αἰγυπτίων βοηθέειν· τὸν δὲ ἱρέα ἐς ἀπορίην ἀπειλημένον ἐσελθόντα ἐς τὸ μέγαρον πρὸς τῷγαλμα ἀποδύρεσθαι, οἷα κινδυνεύει παθέειν· ὀλοφυρόμενον δ' ἄρα μιν ἐπελθεῖν ὕπνον, καί οἱ δόξαι ἐν τῇ ὄψι ἐπιστάντα τὸν θεὸν θαρσύνειν, ὡς οὐδὲν πείσεται ἀχαρι ἀντιάζων τὸν Ἀραβίων στρατόν· αὐτὸς γάρ οἱ πέμψειν τιμωρούς. τούτοισι δὴ μιν πίσυνον τοῖσι ἐνυπνίοισι παραλαβόντα Αἰγυπτίων τοὺς βουλομένους οἱ ἕπεσθαι στρατοπεδεύσασθαι ἐν Πηλουσίῳ (ταύτῃ γάρ εἰσι αἱ ἐσβολαί). ἕπεσθαι δὲ οἱ τῶν μαχίμων μὲν οὐδένα ἀνδρῶν, καπήλους δὲ καὶ χειρώνακτας καὶ ἀγοραίους ἀνθρώπους. ἐνθαῦτα ἀπικομένου, τοῖσι ἐναντίοισι αὐτοῖσι ἐπιχυθέντας νυκτὸς μῦς ἀρουραίους κατὰ μὲν φαγέειν τοὺς φαρετρεῶνας αὐτῶν, κατὰ δὲ τὰ τόξα, πρὸς δὲ τῶν ἀσπίδων τὰ ὄχανα, ὥστε τῇ ὑστεραίῃ φευγόντων σφέων γυμνῶν ὅπλων πεσέειν πολλούς. καὶ νῦν οὗτος ὁ βασιλεὺς ἕστηκε ἐν τῷ ἱρῷ τοῦ Ἡφαίστου λίθινος, ἔχων ἐπὶ τῆς χειρὸς μῦν, λέγων διὰ γραμμάτων τάδε· ἐς ἐμὲ τις ὁρέων εὐσέβης ἐστω.

1. Give the Attic forms of ἀπελέσθαι, σῦκων, ὄψι, ἀπικομένους, ὁρέων, and the Ionic forms of πρᾶγμα, στρατεία, ποιοῦσι, ὠντίνων, οἵστισι, ὅπως, ων.

2. Derive χειρωναξ, ὄχανον, εὐσέβης, ἀπορίη.

(B.) XENOPHON—*Anabasis*, B. III., c. iii., 16.

Translate :—

Ἀκούω δ' εἶναι ἐν τῷ στρατεύματι ἡμῶν Ῥοδίους, ὧν τοὺς πολλοὺς φασιν ἐπίστασθαι σφενδονᾶν, καὶ τὸ βέλος αὐτῶν καὶ διπλάσιον φέρεσθαι τῶν Περσικῶν σφενδονῶν. ἐκεῖναι γὰρ διὰ τὸ χειροπληθεῖσι τοῖς λίθοις σφενδονᾶν ἐπὶ βραχὺ ἐξικνοῦνται, οἱ δὲ Ῥόδιοι καὶ ταῖς μολυβδίσιν ἐπίστανται χρῆσθαι. ἢν οὖν αὐτῶν ἐπισκεψώμεθα τίνες πέπανται σφενδόνας, καὶ τούτῳ μὲν δῶμεν αὐτῶν ἀργύριον, τῷ δὲ ἄλλας πλέκειν ἐθέλοντι ἄλλο ἀργύριον τελῶμεν, καὶ τῷ σφενδονᾶν ἐντεταγμένῳ ἐθέλοντι ἄλλην τινὰ ἀτέλειαν εὑρίσκωμεν, ἴσως τινὲς φανοῦνται ἱκανοὶ ἡμᾶς ὠφελεῖν.

1. Write down all the persons of ἐπίστανται, and parse πέπανται and φανοῦνται.

2. Point out a peculiarity in the contraction of χρῆσθαι.

3. Explain why ἐπισκεψώμεθα, δῶμεν, τελῶμεν, and εὑρίσκωμεν are in the subjunctive mood.

(C.) Translate the following sentences into Greek :—

a. I hear him saying. I begin to speak. You are wrong to do this.

b. If you were to say this, you would err. If you had said this, you would have erred. If you say this, you will err.

c. Obey those that are wiser (than yourself). Look at these mountains. Do not disobey your parents. Do not steal this book.

(D). Describe the situations of the following places, and mention the events in Grecian History with which they are associated :—

Sphacteria, Artemisium, Coronea, Potidœa.

(A.) HOMER—*Iliad*, Book iii., vv. 355–364.

Translate :—

Ἦ ῥα, καὶ ἀμπεπαλὼν προΐει δολιχόσκιον ἔγχος, 355
καὶ βάλε Πριαμίδαο κατ' ἀσπίδα πάντοσ' ἴσην.
διὰ μὲν ἀσπίδος ἦλθε φαεινῆς ὄβριμον ἔγχος,
καὶ διὰ θώρηκος πολυδαιδάλου ἠρήρειστο
ἀντικρὺ δὲ παραὶ λαπάρην διάμησε χιτῶνα

ἔγχος· ὁ δ' ἐκλίνθη καὶ ἀλεύατο Κῆρα μέλαιναν.
'Ατρείδης δὲ ἐρυσσάμενος ξίφος ἀργυρόηλον
πλῆξεν ἀνασχόμενος κόρυθος φάλον· ἀμφὶ δ' ἄρ' αὐτῷ
τριχθά τε καὶ τετραχθὰ διατρυφὲν ἔκπεσε χειρός.
'Ατρείδης δ' ὤμωξεν ἰδὼν εἰς οὐρανὸν εὐρύν.

1. Parse *fully* ἀμπεπαλών, προΐει, ἠρήρειστο, ἀλεύατο, ἀνασχόμενος, διατρυφέν, ὤμωξεν.

2. Derive or decompound δολιχόσκιος, πολυδαίδαλος, ἀργυρόηλος, τριχθά.

3. In verse 364 point out any word which usually admits or requires the letter *f*. What change in another word would its insertion require?

(B.) HOMER—*Iliad*, Book v., vv. 311–322.

Καί νύ κεν ἔνθ' ἀπόλοιτο ἄναξ ἀνδρῶν Αἰνείας,
εἰ μὴ ἄρ' ὀξὺ νόησε Διὸς θυγάτηρ 'Αφροδίτη,
μήτηρ, ἥ μιν ὑπ' 'Αγχίσῃ τέκε βουκολέοντι·
ἀμφὶ δ' ἑὸν φίλον υἱὸν ἐχεύατο πήχεε λευκώ,
πρόσθε δὲ οἱ πέπλοιο φαεινοῦ πτύγμ' ἐκάλυψεν,
ἔρκος ἔμεν βελέων, μή τις Δαναῶν ταχυπώλων
χαλκὸν ἐνὶ στήθεσσι βαλὼν ἐκ θυμὸν ἕλοιτο.
'Η μὲν ἑὸν φίλον υἱὸν ὑπεξέφερεν πολέμοιο·
οὐδ' υἱὸς Καπανῆος ἐλήθετο συνθεσιάων
τάων ἃς ἐπέτελλε βοὴν ἀγαθὸς Διομήδης,
ἀλλ' ὄγε τοὺς μὲν ἑοὺς ἠρύκακε μώνυχας ἵππους
νόσφιν ἀπὸ φλοίσβου, ἐξ ἀντυγος ἡνία τείνας.

1. Write down the Attic forms of κεν, μιν, ἐχεύατο, ἔμεν, συνθεσίαων, τάων, ἠρύκακε.

2. Point out any instances of *Tmesis* in extract B, and give the derivations of βουκολέω, πτύγμα, ταχύπωλος, συνθεσία, μῶνυξ, φλοῖσβος.

(C.) EURIPIDES—*Medea*, vv. 976–1001.

νῦν ἐγτίδες οὐκέτι μοι παίδων ζόας, στρ
οὐκέτι στείχουσι γὰρ ες φόνον ἤδη.
δὲζεται νύμφα χρυσέων ἀναδεσμῶν
δέξεσαι δύστανος ἄταν
ξανθᾷ δ' ἀμφὶ κόμᾳ θήσει τὸν "Αιδα 980
κόσμον αὐτὰ χεροῖν [λαβοῦσα].
πείσει χάρις ἀμβρόσιός τ' αὐγὰ πέπλον ἀντ.
χρυσόσενκτόν τε στέφανον περιθέσθαι·
νερτέροις δ ἤδη πάρα νυμφοκομήσει. 985
τοῖον εἰς ἔρκος πεσεῖται
καὶ μοῖραν θανάτου δύστανος· ἄταν δ
οὐχ ὑπερφεύξεται.
σὺ δ', ὦ τάλαν, ὦ κακόνυμφε κηδεμών τυράννων, στρ 990
παισὶν ον κατειδὼς

Translate with the reading παισὶν, οὐ κατειδὼς ὀλέθριον βιοτάν, and omitting the comma after προσάγεις.

ὄλεθρον βιοτᾷ προσάγεις, ἀλόχῳ
τε σᾷ στυγερὸν θάνατόν.
δύστανε μοίρας ὅσον παροιχει. 995
μεταστένομαι δὲ σὸν ἄλγος, ὦ τάλαινα παίδων ἀντ.
μᾶτερ, ἃ φονεύσεις
τέκνα νυμφιδίων ἕνεκεν λεχέων,
ἃ σοι προλιπὼν ἀνόμως 1000
ἄλλᾳ ξυνοικεῖ πόσις συνεύνῳ.

1. Point out any *six* of the Doric forms in this extract, giving their Attic equivalents. Account for the difference of dialects in the dialogue and chorus of Attic tragedy.

Appendix D. — Examination Papers for Scholarships.

2. What was the function of the chorus, and of whom did the chorus of this play consist? Explain the expression *χόρον διδόναι*. In what building, and at what season of the year, were the new tragedies produced at Athens?

3. Derive *ἀναδεσμος*, *ἔρκος*, *σύνευνος*, and *κηδεμών*. What part of the verb is *ὑπεκδραμεῖται*? Write down its present and second aorist. Explain the exact force of each of the prepositions which enter into its composition.

4. Explain the origin of the names of epic and dramatic poetry.

5. Define the terms *cæsura*, *arsis*, and *thesis*, and point out the most important cæsuras in the following lines:—

ὡ μῖσος ὦ μῖγιστον ἐχθίστη γύναι
θεοῖς τε κἀμοὶ παντί τ' ἀνθρώπων γένει,

GREEK VERSE.—SENIOR CLASSICAL SCHOLARSHIP.

Translate:—

1. HOMER—*Odyssey*, Book vii., 114–128.

ἔνθα δὲ δένδρεα μακρὰ πεφύκει τηλεθόωντα,
ὄγχναι καὶ ῥοιαὶ καὶ μηλέαι ἀγλαόκαρποι, 115
συκαῖ τε γλυκεραὶ καὶ ἐλαῖαι τηλεθόωσαι.
τάων οὔ ποτε καρπὸς ἀπόλλυται οὐδ' ἀπολείπει
χείματος οὐδὲ θέρευς, ἐπετήσιος· ἀλλὰ μάλ' αἰεί
ζεφυρίη πνείουσα τὰ μὲν φύει, ἄλλα δὲ πέσσει.
ὄγχνη ἐπ' ὄγχνῃ γηράσκει, μῆλον δ' ἐπὶ μήλῳ, 120
αὐτὰρ ἐπὶ σταφυλῇ σταφυλή, σῦκον δ' ἐπὶ σύκῳ.
ἔνθα δέ οἱ πολύκαρπος ἀλωὴ ἐρρίζωται,
τῆς ἕτερον μὲν θειλόπεδον λευρῷ ἐνὶ χώρῳ
τέρσεται ἠελίῳ, ἑτέρας δ' ἄρα τε τρυγόωσιν,
ἄλλας δὲ τραπέουσι· πάροιθε δέ τ' ὄμφακές εἰσιν 125
ἄνθος ἀφιεῖσαι, ἕτεραι δ' ὑποπερκάζουσιν.
ἔνθα δὲ κοσμηταὶ πρασιαὶ παρὰ νείατον ὄρχον
παντοῖαι πεφύασιν, ἐπηετανὸν γανόωσαι.

Explain the forms *τρυγόωσι*, *ἠβώωσα*.

2. SOPHOCLES—*Œd. Col.*, vv. 536–548.

ΟΙ. *ἰὼ δῆτα μυρίων γ' ἐπιστροφαὶ κακῶν·*
ΧΟ. *ἔπαθες* ΟΙ. *ἔπαθον ἄλαστ' ἔχειν.*
ΧΟ. *ἔρεξας* ΟΙ. *οὐκ ἔρεξα.* ΧΟ. *τί γάρ;* ΟΙ. *ἐδεξάμην*
δῶρον, ὃ μήποτ' ἐνὼ ταλακάρδιος 540
ἐπωφέλησα πόλεος ἐξελεσθαι.
ΧΟ. *δύστανε, τί γάρ; ἔθου φόνον*
ΟΙ. *τί τοῦτο; τί δ' ἐθέλεις μαθεῖν;*
ΧΟ. *πατρός;* ΟΙ. *παπαῖ, δευτέραν ἔπαισας ἐπὶ νόσῳ νόσον.*
ΧΟ. *ἔκανες* ΟΙ. *ἔκανον. ἔχει δέ μοι* 545
ΧΟ. *τί τοῦτο;* ΟΙ. *πρὸς δίκας τι.* ΧΟ. *τί γάρ;* ΟΙ. *ἐγὼ φράσω.*
καὶ γὰρ ἀλοὺς ἐφόνευσα καὶ ὤλεσα·
νόμῳ δὲ καθαρὸς, ἄϊδρις ἐς τόδ' ἦλθον

Notice any peculiar constructions in this passage.

3. Translate into Tragic Iambics:

SHAKESPEARE—*Julius Cæsar*, Act ii.

Cal. What mean you, Cæsar? Think you to walk forth?
You shall not stir out of your house to-day.

Cæs. Cæsar shall forth. The things that threatened me
Ne'er looked but on my back; when they shall see
The face of Cæsar, they are vanished.

Cal. Cæsar, I never stood on ceremonies,
Yet now they fright me. There is one within,
Besides the things that we have heard and seen,
Recounts most horrid sights seen by the watch.
A lioness hath whelped in the streets;
And graves have yawned and yielded up their dead:
Fierce fiery warriors fight upon the clouds
In ranks, and squadrons, and right form of war,
Which drizzled blood upon the Capitol:
The noise of battle hurtled in the air,
Horses did neigh and dying men did groan;
And ghosts did shriek and squeal about the streets.
Oh, Cæsar! these things are beyond all use,
And I do fear them.

JOHN RYALL, *Professor.*

LATIN.—SCHOLARSHIPS OF THE SECOND AND THIRD YEARS.

Translate :—

VIRGIL—*Eclogues* iv., 18–30.

At tibi prima, puer, nullo munuscula cultu,
Errantes hederas passim cum baccare tellus
Mixtaque ridenti colocasia fundet acantho.
Ipsae lacte domum referent distenta capellae
Ubera, nec magnos metuent armenta leones.
Ipsa tibi blandos fundent cunabula flores.
Occidet et serpens, et fallax herba veneni
Occidet; Assyrium vulgo nascetur amomum.
At simul heroum laudes et facta parentis
Iam legere et quae sit poteris cognoscere virtus;
Molli paullatim flavescet campus arista,
Incultisque rubens pendebit sentibus uva,
Et durae quercus sudabunt roscida mella.

Translate into Latin Hexameters :—

'Tis morning; and the sun, with ruddy orb
Ascending, fires the horizon; while the clouds
That crowd away before the driving wind,
More ardent as the disk emerges more,
Resemble most some city in a blaze,
Seen through the leafless wood. His slanting ray
Slides ineffectual down the snowy vale,
And, tinging all with his own rosy hue,
From ev'ry herb and ev'ry spiry blade
Stretches a length of shadow o'er the field.

Translate into Latin prose :—

It is hard to personate and act a part long; for where truth is not at the bottom, nature will always be endeavouring to return, and will peep out and betray herself one time or other. Therefore, if any man think it convenient to seem good, let him be so indeed, and then his goodness will appear to everybody's satisfaction; so that upon all accounts sincerity is true wisdom. Particularly as to the affairs of this world, integrity hath many advantages over all the fine and artificial ways of dissimulation and deceit; it is much the plainer and easier, much the safer and more secure way of dealing in the world.

Appendix D.

Examination Papers for Scholarships.

LATIN.—FIRST YEAR'S SCHOLARSHIPS.

1. Trace the course of the rivers Padus, Rhenus, and Rhodanus, and name the ancient cities on their banks.
2. Give the principal parts of *juvo, lavo, ferveo, mordeo, nubo* and *mergo.*
3. Explain fully the words *comitia curiata, tributa* and *centuriata.*
4. State the rules for the Sapphic stanza, with examples.
5. Explain the constructions of *interest* and *refert.*

Re-translate into Latin :—

I can think of none more eminent than yourself. You must imitate, therefore, yourself; contend with yourself; for after such great things, done, it would be a disgrace to you not to be like yourself. Since this, then, is the case, there is no occasion to exhort, but to congratulate with you: for that has happened to you, which scarce ever happened to any man, that by the utmost severity of punishing, instead of acquiring odium, you are become popular, and not only with the better sort, but the very meanest of the city.

LATIN.—SENIOR SCHOLARSHIP.

Subject for a Latin Essay :—

"Doctrina sed vim promovet insitam
Rectique cultus pectora roborant."

Translate into Latin Lyrics :—

O Caledonia ! stern and wild !
Meet nurse for a poetic child !
Land of brown heath and shaggy wood,
Land of the mountain and the flood,
Land of my sires ! what mortal hand
Can e'er untie the filial band,
That knits me to thy rugged strand !
Still, as I view each well-known scene,
Think what is now and what hath been,
Seems as, to me, of all bereft,
Sole friends thy woods and streams are left;
And thus I love them better still,
E'en in extremity of ill.

B. LEWIS, *Professor.*

ZOOLOGY.—SENIOR SCHOLARSHIP IN NATURAL HISTORY.

1. Describe the skull placed on the table. To what order, family, and genus of mammals does it belong?
2. Refer to their families and genera the accompanying shells.
3. State, in a few short paragraphs, the chief characters of the sessile-eyed crustaceans (Hedriophthalmia).

BOTANY.

1. Describe the spore-fruit of a moss, noting both its structure and mode of development.
2. What plants, not belonging to the Compositæ, appear to have syngenesious anthers? Give the characters of any such plants with which you are familiar.
3. A British flowering plant, not yet in fruit, has five sepals, five petals, five or ten stamens, and a dicarpous ovary. In what order would you proceed to ascertain its remaining characters, so as to determine its place in the system?

ZOOLOGY AND BOTANY.—SCHOLARSHIP IN MEDICINE.

1. Describe the vertebral column of a Bird.
2. In what Vertebrata do external gills occur? Compare these with the internal gills of Fishes.
3. Give the dental formula of the Badger.
4. Define the Order Hymenoptera.
5. Compare the Pneumo-branchiata (= Pulmonata) with other Gasteropods.

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6. To what three groups may the British Orders of Thalamifloræ be conveniently referred?
7. 8. Give, in their proper order, the distinctive characters of the flower of any rosaceous plant which you have examined.
9. Define briefly the Order Primulaceæ.
10. Describe the fruit of the Yew, noting the development of its several parts.

J. REAY GREENE, B.A., M.D.

FIRST YEAR'S MATHEMATICAL SCHOLARSHIP.

1. Add ·194 of a guinea to $\frac{1}{3}(\cdot125)^2$ of a pound.
2. Extract the square root of 161·1716, and show that the number of square inches in a square mile is $3^4 . 2^{12} . 10^2 . 11^2$.
3. In every triangle the sum of two sides is greater than the third side.

ABCD is a parallelogram, and DGF is drawn cutting off equal lengths GC, FC from CA, CB; prove that AC=BC+FC.

4. If through any point inside a circle two chords be drawn, the rectangle contained by the segments of the one is equal to that contained by the segments of the other.
5. A point P is taken and joined to the angles A, B, C, of a triangle. If the lines bisecting AP, BP, CP, meet in a point, prove that P lies on the circumference of a certain circle.
6. If $2s=a+b+c$, prove that—

$$1^\circ.\ \overline{s-a}^2+\overline{s-b}^2+\overline{s-c}^2+2\,\overline{s-a}\,\overline{s-b}\,\overline{s-c}=abc.$$

$$2^\circ.\ \frac{abc}{\overline{s-a}.\overline{s-b}.\overline{s-c}}=\frac{b+c}{s-a}+\frac{c+a}{s-b}+\frac{a+b}{s-c}.$$

7. Solve the equations—

$$1^\circ.\ \sqrt{x-1}+\sqrt{x-4}=\sqrt{4x-3}.$$

$$2^\circ.\ \begin{cases} xy=2\sqrt{3}. \\ x^2-y^2=11. \end{cases}$$

8. Define an arithmetic progression and find the sum to n terms.

Sum to 21 terms the series $10+9\frac{1}{2}+9+\ldots$

9. In an arithmetic series of an odd number (n) of terms the middle term is m; prove that the sum of the series is mn.

Also if to the middle term there be added the three middle terms, then the five middle terms, and so on till all are exhausted, the total sum will be $\frac{(n+1)^2 m}{4}$.

10. Explain the principle on which the trigonometrical functions of angles greater than 90° are found.

Reduce to degrees and thence find all the trigonometrical functions of $133\frac{1}{3}$ grades.

Appendix D. Examination Papers for Scholarships.

11. If $\tan\beta=\cos\alpha$, prove that $\tan\left(\frac{\pi}{4}-\beta\right)=\tan^2\frac{\alpha}{2}$.

12. In any triangle $\tan\frac{A}{2}=\sqrt{\frac{s-b}{s}\cdot\frac{s-c}{s-a}}$. Prove this.

SCHOLARSHIP EXAMINATION.—SECOND YEAR.

1. In equal circles the angles subtended at the centre are proportional to the subtending arcs.

Two circles whose centres are A, B, and which touch externally at C, touch internally a third at D, E, respectively: prove that $\angle ADC=\angle CED$, and $\angle CEB=\angle CDE$.

2. Prove that $(a+b+c)^5-a^5-b^5-c^5=5(a+b)(b+c)(c+a)(a^2+b^2+c^2+ab+ac+bc)$.

3. Solve the equations—

$$\left.\begin{aligned}(y-a)(z-a)&=a^2\\(z-b)(x-b)&=b^2\\(x-c)(y-c)&=c^2\end{aligned}\right\}$$

and find the conditions that the roots of a quadratic equation may be real, equal, or imaginary.

4. Assuming the truth of the binomial theorem for positive integral indices, prove it generally.

Find the coefficient of x^n in the expansion of $\frac{1}{(1+x)(1+ax)(1+a^2x)\ldots\text{to}\infty}$.

5. Assuming the expansion of e^x, deduce that of $\log_e(1+x)$.

6. Explain why cos 4α being given, you would expect to find four different values of cos α. Suppose cos β be one of them, find the other three in terms of β.

7. If $\sin\theta=\tan\alpha\tan\beta$, and $\sin\alpha=\tan\theta.\tan\phi$, prove that $\sin\phi=\cos\theta\cos\beta$.

8. Find the radius of the inscribed circle of a triangle in terms of the angles, and the radius of the circumscribed circle.

The lines joining the angles of the triangle ABC to the centres of the escribed circles meet the sides in the points D, E, F:—prove that $\triangle DEF:\triangle ABC::2abc:(a+b)(b+c)(c+a)$.

9. If $a, b, c\ldots k$ be the roots of the equation $f(x)=x^n+p_1x^{n-1}+\ldots+q=0$, prove that $f(x)=(x-a)(x-b)\ldots(x-k)$.

If $\alpha\beta\ldots k$ be the imaginary roots of $x^{2m}=1$, prove that $m=(1-\alpha)(1-\beta)\ldots(1-k)$.

10. Investigate the equation to an ellipse referred to its axes.

S being the pole, a tangent at P meets the major axis in T; prove that if $SP=e.ST$, $PT=\sqrt{1+e^2}.ST$.

11. A and B are two fixed points, and P is taken such that $\tan PAB.\tan PBA=\cos\alpha$, α being $<90°$; prove that P traces out an ellipse whose eccentricity $=\sqrt{2}\sin\frac{\alpha}{2}$.

N.B.—Candidates for the Engineering Scholarship of the second year will substitute for 10 and 11 above the following:—

*10. Express the cosine of the angle of a spherical triangle in terms of the sides.

Perpendicular arcs AD, BE, CF, from the angles ABC on the opposite sides meet in O, prove—

1°. That cos AO . cos a=cos OB cos b=cos OC . cos c.

2°. That sin OD . cos A=sin OE . cos B=sin OF . cos C.

ENGLISH LANGUAGE.—LITERARY SCHOLARSHIP OF THE FIRST YEAR.

1. Give the derivation of these words:—*imitation, resemblance, countenance, proportion, system, mimic, physical, geometry.*
2. Parse the following sentences:—
   (*a.*) To be, or not to be, that is the question.
   (*b.*) Fools rush in, where angels fear to tread.
   (*c.*) Rich gifts wax poor, when givers prove unkind.
3. What changes in the English language resulted from the Norman Conquest?
4. When did Norman-French cease to be used in the Courts of Law, and in the schools?

HISTORY.

5. Narrate the leading events in the invasion of Greece by Xerxes.
6. Compare the Roman character with that of the Carthaginians.

ENGLISH LANGUAGE AND LITERATURE.—LITERARY SCHOLARSHIP OF THE SECOND AND THIRD YEARS.

1. State the facts and dates of the Anglo-Saxon invasion. Whence did the invaders come, and where did they settle?
2. Trace the introduction and development of Norman-French in the English language.
3. Discuss any grammatical points, calling for remark, in the following sentences:—
   (*a.*) "You ought not walk."
   (*b.*) "And that same eye, whose bend doth awe the world,
   Did lose his lustre."
   (*c.*) "He plucked me ope his doublet."
4. What is the design of Spencer's "Faerie Queene"?
5. Characterize the dramatic genius of Ben Jonson.
6. What is Drayton's "Polyolbion?"

ENGLISH LANGUAGE AND LITERATURE.—SENIOR SCHOLARSHIP.

1. Show that English is a mixed language, in Grammar as well as in Vocabulary.
2. Compare the proportion of Anglo-Saxon and Norman-French derivatives in Piers Plowman, and in Chaucer.
3. Consider Shakespeare and Ben Jonson as representing the Romantic and Classical schools of dramatic poetry.

HISTORY.

4. Were the commons represented in the Witenagemot?
5. Trace the origin of Trial by Jury.
6. Trace the origin and development of the Feudal System.
7. What were the causes of the decline of the Feudal System?
8. Mention the most remarkable Confirmations of Magna Charta.

WILLIAM RUSHTON, *Professor.*

Appendix D.

Examination Papers for Scholarships.

MODERN LANGUAGES.

Translate into French, Italian, or German :—

1. Lewis XIV. playing one day at backgammon, there happened a doubtful move. They were disputing. The courtiers remained silent. The Count de Grammont entered : "Be our judge," said the King. "Sire, it is your Majesty who has lost," said the Count. "Oh ! how can you give it against me, before you know the matter in question ?" "Oh ! Sire, do not you see that, if the case had been even so little doubtful, all these gentlemen would have given it for you."

2. Translate into French :—

"Among those who sustained the truth of Christianity by argument, rather than authority, the first place, both in order of time and of excellence, is due to Pascal, though his thoughts were not published till 1670, some years after his death, and, in the first edition, not without suppressions. They have been supposed to be fragments of a more systematic work that he had planned, or perhaps only reflections committed to paper, with no design of publication in their actual form. But, as is generally the case with works of genius, we do not easily persuade ourselves that they could have been improved by any such alteration as would have destroyed their type. They are at present bound together by a real coherence through the predominant character of the reasonings and sentiments, and give us everything that we could desire in a more regular treatise, without the tedious verbosity which regularity is apt to produce. The style is not so polished as in the 'Provincial Letters,' and the sentences are sometimes ill-constructed and elliptical. Passages almost transcribed from Montaigne have been published by careless editors as Pascal's ; but the 'Thoughts of Pascal' are to be ranked, as a monument of his genius, above the 'Provincial Letters,' though some have asserted the contrary. They burn with an intense light ; condensed in expression, sublime, energetic, rapid, they hurry away the reader till he is scarcely able or willing to distinguish the sophisms from the truth they contain. Pascal had, probably, not read very largely, which has given an ampler sweep to his genius. Except the Bible and the writings of St. Augustin, the book that seems most to have attracted him was the 'Essays of Montaigne ;' yet no men could be more unlike in personal dispositions and in the cast of their intellect. But Pascal, though abhorring the religious and moral carelessness of Montaigne, found much that fell in with his own reflections in the contempt of human opinions, the perpetual humbling of human reason, which runs through the bold and original work of his predecessor." —*Hallam.*

1. Who were the Trouvères and the Troubadours ?
2. What is understood in Literature by the word Renaissance ?
3. What was the moral and literary influence of Port Royal ?
4. Give a brief account of the origin and history of the Académie Française.
5. Mention the periods when the literatures of Italy, Spain, Germany, and England exercised an influence on that of France.
6. State what you know of the formation of the Italian language.
7. State what you know of the classical revival in Italy during the fourteenth century, and its influence on the French and Italian languages and literature.
8. Give a brief account of the life and works of Tasso.
9. Give a sketch of the life, writings, and influence of Lessing.
10. Name the best dramatic works of Goethe.

R. DE VERICOUR.

GREEK.—JUNIOR LITERARY SCHOLARSHIPS OF THE SECOND YEAR.

Translate —

(A.)—HOMER—*Iliad*, ix., vv. 525–545.

Κουρῆτές τ' ἐμάχοντο καὶ Αἰτωλοὶ μενεχάρμαι
ἀμφὶ πόλιν Καλυδῶνα καὶ ἀλλήλους ἐνάριζον,
Αἰτωλοὶ μὲν ἀμυνόμενοι Καλυδῶνος ἐρατνῆς,
Κουρῆτες δὲ διαπραθέειν μεμαῶτες Ἀρηϊ.
καὶ γὰρ τοῖσι κακὸν χρυσόθρονος Ἄρτεμις ὦρσεν
χωσαμένη, ὅ οἱ οὔτι θαλύσια γουνῷ ἀλωῆς
Οἰνεὺς ῥέξ'· ἄλλοι δὲ θεοὶ δαίνυνθ' ἑκατόμβας,
οἶῃ δ' οὐκ ἔρρεξε Διὸς κούρῃ μεγάλοιο.
ἢ λάθετ' ἢ οὐκ ἐνόησεν· ἀάσατο δὲ μέγα θυμῷ.
ἡ δὲ χολωσαμένη, δῖον γένος, ἰοχέαιρα,
ὦρσεν ἔπι χλούνην σῦν ἄγριον ἀρχιόδοντα,
ὃς κακὰ πόλλ' ἐρδεσκεν ἔθων Οἰνῆος ἀλωήν·
πολλὰ δ' ὅγε προθέλυμνα χαμαὶ βάλε δένδρεα μακρὰ
αὐτῇσιν ῥίζῃσι καὶ αὐτοῖς ἄνθεσι μήλων.
τὸν δ' υἱὸς Οἰνῆος ἀπέκτεινεν Μελέαγρος,
πολλέων ἐκ πολίων θηρήτορας ἀνδρας ἀγείρας
καὶ κύνας· οὐ μὲν γάρ κ' ἰδάμη παύροισι βροτοῖσιν·
τόσσος ἦεν, πολλοὺς δὲ πυρῆς ἐπέβησ' ἀλεγεινῆς.
ἡ δ' ἀμφ' αὐτῷ θῆκε πολὺν κέλαδον καὶ ἀϋτὴν,
ἀμφὶ συὸς κεφαλῇ καὶ δέρματι λαχνήεντι,
Κουρήτων τε μεσηγὺ καὶ Αἰτωλῶν μεγαθύμων.

1. Explain the grammatical forms of *ἀάσατο*, *ἔρδεσκεν*, *μενεχάρμαι*, *διαπραθέειν*, *δένδρεα*, and derive *θαλύσια*, *μενεχάρμαι*, *ἐνάριζον*, *γουνῷ*, *ἀλωῆς*, *ἀάσατο*, *προθέλυμνα*, *ἰοχέαιρα*.

2. Express in Latin *αὐτῇσι ῥίζῃσι*. Of what other meaning is *μῆλον* susceptible?

3. Explain the different constructions of *ἀμύνειν* and *ἀμύνεσθαι*; illustrating by examples.

4. Who are meant respectively by the Curetes and the Ætolians? Relate the story to which the text refers.

(B).—EURIPIDES—*Orestes*.

1. Translate :—

a. *βλέπω δὲ πᾶσαν εἰσοδον, πότ' ὄψομαι*
Μενέλαον ἥκοντ'· ὡς τά γ' ἄλλ' ἐπ' ἀσθενοῦς
ῥώμης ἐχούμεθ', ἤν τι μὴ κείνου πάρα
σωθῶμεν. ἄπορον χρῆμα δυστυχῶν δόμος.

a. *οὐκ εἰσακούει; οὐχ ὁρᾷθ' ἑκηβόλων*
τόξων πτεροὺς γλυφίδας ἐξορμωμένας;
ἆ ἆ.
τί δῆτα μέλλει; ἐξακρίζει αἰθέρα
πτεροῖς· τὰ Φοίβου δ' αἰτιᾶσθε θέσφατα.
ἔα·
τί χρῆμ' ἀλύω, πνεῦμ' ἀνεῖς ἐκ πνευμόνων;
ποῖ ποῖ ποθ' ἡλάμεσθα δεμνίων ἄπο;
ἐκ κυμάτων γὰρ αὖθις αὖ γαλήν' ὁρῶ.
Translate with the reading *γαλῆν*.

d. *ὦδ' εἶμ' Ὀρέστης, Μενέλεως, ὃν ἱστορεῖς.*
ἐκὼν ἐγώ σοι τἀμὰ σημανῶ κακά.
τῶν σῶν δὲ γονάτων πρωτόλεια θιγγάνω
ἱκέτης, ἀφύλλου στόματος ἐξάπτων λιτάς·
σῶσόν μ'· ἀφῖξαι δ' αὐτὸν εἰς καιρὸν κακῶν.

Appendix D.

Examination Papers for Scholarships.

h. ἔκ τοί με τήξεις· καί σ' ἀμείψασθαι θέλω
φιλότητι χειρῶν· τί γὰρ ἔτ' αἰδοῦμαι τάλας;
ὦ στέρν' ἀδελφῆς, ὦ φίλον πρόσπτυγμ' ἐμόν,
τάδ' ἀντὶ παίδων καὶ γαμηλίου λέχους
προσφθέγματ' ἀμφὶ τοῖς ταλαιπώροις πάρα.

i. Ἑλένης θανούσης, ἤν τι Μενέλεως σὲ δρᾷ
ἢ τόνδε κἀμέ, πὰν γᾶρ ἐν φίλον τόδε,
λέγ' ὡς φονεύσεις Ἑρμιόνην.

k. Ἀργεῖον ξίφος ἐκ θανάτου πέφευγα
βαρβάροις εὐμάρισιν,
κεδρωτὰ παστάδων ὑπὲρ τέρεμνα
Δωρικάς τε τριγλύφους,
φροῦδα φροῦδα, γᾶ γᾶ,
βαρβάοοισι δρασμοῖς.

2. Give the meaning and derivation of the following words :—*ὀχμάζεις' ἐξαμιλλωνται, πρωτόλεια, ἀνεχόρευε, ὑποστέλλει, πάρεργον, ἀπέδοτο, πρόσαντες, νωχελῆ, παράσειρος.*

(C.)—Retranslate into Iambic verse :—

I happened indeed from the country into the city to be coming, desiring(1) to hear the news both about thee and about Orestes ; for affection to thy father I always(2) had, and thy house fed me when a poor man, for(6) (it is) an excellent thing(3) to have(4) friends. But I see a crowd mounting(5) and sitting-on a height, where they say that Danaus first to Ægyptus satisfaction giving, assembled the people to common settlements.

(1) *δεόμενος.* (2) *ἀεί ποτε.* (3) *γενναῖον.* (4) *χρῆσθαι.* (5) *στείχω.* (6) *δέ.*

NATURAL PHILOSOPHY.—MEDICAL SCHOLARSHIP OF THE SECOND YEAR.

1. What is meant by uniformly accelerated motion? Illustrate your meaning by an example.
2. How can the relative velocity of sound in different gases be experimentally determined?
3. Describe some method of freezing water by the evaporation of ether.
4. What is meant by the "mobile equilibrium of temperature?"
5. How would you form a pure solar spectrum? What is meant by the fixed lines of the spectrum?
6. What si meant by the optic axis of the eye? What by the focal centre?
7. Explain the principle of the stereoscope.
8. What do you mean by consequent poles in a magnet?
9. Describe the induction coil.
10. Describe the action of the earth on a horizontal current moveable round a vertical axis.

NATURAL PHILOSOPHY.—ENGINEERING SCHOLARSHIP OF THE THIRD YEAR.

1. A uniform square table whose side is equal to a and its weight=20 lbs. is supported at a point in the under surface, weights of 1, 3, 5, 7 lbs. are suspended from its four corners in order ; determine the position of the point of support.
2. Two smooth cylinders, of equal radii, just fit between two parallel vertical walls, and rest on a horizontal plane without pressing against the walls ; if a third cylinder of equal radius be placed on them, find the resultant pressure against either wall

3. A right cone whose height is a, and the sine of half its vertical angle $=\sqrt{\frac{3}{7}}$, rests with its base in contact with a smooth vertical wall, and its curved surface on a smooth horizontal rod parallel to the wall, find the least possible distance of the rod from the wall.

4. A stone is dropped into a well and is heard to strike the water after a lapse of t seconds, required the depth of the well if the velocity of sound be u feet per second.

5. Find the ratio of the masses of two perfectly elastic balls, so that the first, by impinging directly on the second at rest may lose $\frac{1}{n}$th of its velocity.

6. Investigate the time of a heavy particle falling down a small arc of a vertical circle terminating at its lowest point.

7. Investigate a formula for reducing the observed barometric height to the equivalent height at $0°$.

8. State some instances of the conversion of mechanical work into heat, and give the relation between a unit of heat and amount of work it can produce.

9. State and prove the rule for ascertaining the magnifying power of a telescope.

10. What is meant by an astatic needle, why is it used in the galvanometer?

11. Describe the electrophorus and its action.

12. What are the limits to the charge of a Leyden jar?

JOHN ENGLAND.

GEOLOGY AND MINERALOGY.—THIRD YEAR'S ENGINEERING SCHOLARSHIP.

1. What are the minerals which enter into the composition of Basaltic Rocks, and what forms do these rocks assume?

2. What is the nature of the rocks which are known as Breccias, and in what position in the British Isles are these rocks most abundant?

3. What is the physical aspect, and what is the mineral composition of Metamorphic Rocks?

4. In what geological horizon have the earliest traces of land vegetation been found?

5. What is the position, and what are the characteristic fossils of the Block Shales of the Malverns?

6. Give the sequence of the Devonian Rocks as these occur in Devonshire; and mention some of the fossils which are characteristic of this group of rocks.

7. What order of Reptiles is most abundant in the Triassic formation?

8. What is the geological position of the Cleaveland ironstone?

9. What members of the Cretaceous formation are represented in Ireland?

10. What is the nature of Serpentine, and where in Ireland does this mineral occur in the greatest abundance?

11. What is the difference between Native metals and ores?

12. What is the composition of Labrador Felspar?

ROBERT HARKNESS.

CHEMISTRY.—SENIOR SCHOLARSHIP OF ARTS OF THE FOURTH YEAR.

1. Explain by symbols the action of chlorine on protosulphate of iron, and of sulphuretted hydrogen on persulphate of iron.

2. One hundred cubic inches of air are exploded with fifty cubic inches of hydrogen; state the volumes of the gases which have combined, and the volumes of the product and of the residual gases.

Appendix D. — Examination Papers for Scholarships.

3. Required 100 grains of nitric acid; what quantities of nitrate of potassium and sulphuric acid should be employed if normal sulphate of potassium be left, and none of the nitric acid be decomposed?

4. Point out the relations between nitrogen and phosphorus. Write the formulae of the highest acids of each, according to the proper type.

5. Name the crystal having the following notation:—

$$2a : a : 2a : 2c$$
$$\infty a : \infty a : \infty a : 2c$$

How is it produced?

6. Extract metallic aluminum; mark its atomicity; state the reason for giving to its oxide the formula of a sesquioxide.

7. Illustrate by formula, absolute, latent, and active atomicities.

8. Describe the preparation, properties, and uses of the chlorides of tin.

9. Calculate the formula of an organic base from the following data:—

100 grains give on combustion—
C 77·63
H = 7·40
N = 14·97

100 grains of the platinum double salt give 34·17 grs. of metallic platinum. Pt = 197·5, C = 12, N = 14—Cl = 35·5.

10. Describe the simple, mixed, and compound ethers. How are the compound ethers prepared?

11. Describe the class of compounds to which ethylene alcohol belongs.

12. How is glycerine prepared? What views are entertained of its nature?

CHEMISTRY.—JUNIOR SCHOLARSHIPS IN MEDICINE AND IN ENGINEERING OF THE SECOND YEAR.

N.B.—The name and faculty of each student are to be written on each book.

1. Sulphuretted hydrogen is passed into a solution of persulphate of iron; give the reaction in symbols.

2. Ten cubic inches of ammoniacal gas are decomposed by electricity; state the results.

3. Write, according to the proper types, anhydrous oxides of sodium and of barium, hydrates of potassium and of lime, nitric, sulphuric, and phosphoric acids, and ethylamine.

4. Prepare hypochlorous acid; mention its properties.

5. How much oil of vitriol is required to decompose 100 grains of nitrate of potassium, if normal sulphate of potassium be left in the retort?

K = 39.

6. Give the preparation, properties, and composition by weight and by volume of nitric anhydride.

7. Write the formulae of the oxygen compounds of manganese. Prepare permanganate of potassium. To what uses is it applied?

8. Separate lead, silver, manganese, and zinc from each other.

9. Indicate the atomicity of Cl, Mg, Sb, N, Cy (NH_4), C_2H_5.

10. The double salt of platinum and morphia yields on combustion 20·14 p. c. of metallic platinum. Calculate the atomic weight of morphia.

C = 12; Cl = 35; 5; Pt = 197·4.

11. What are the compound ammonias? Write their general formula; give examples.

12. Give examples of monatomic and of diatomic alcohols. Point out the character of each class.

J. BLYTH.

FOURTH YEAR'S MEDICAL SCHOLARSHIP.

1. Describe the peculiarities of that variety of pelvis which is larger than natural in all its dimensions. What disadvantages and dangers are found to accrue from this form of pelvis in the uninpregnated female,—during labour,—and after?

2. Give an outline of the conditions of the ovary in fishes, reptiles, birds, and mammals, specially noticing its situation and connexions, its form and structure, its relative dimensions, and its mode of discharging its contents in each class.

3. What is the nature and constitution of the menstrual fluid? Do you consider it to be a secretion, or an exudation? Give the reasons for your opinion.

4. Describe the origin, progress, and termination of a case of uterine hydatids. What are its symptoms, early and late?

5. A case is referred to you for examination, in which there is an oval abdominal tumour occupying the hypogastric region, and extending from os pubis to umbilicus. Detail the inquiries you would institute with a view to determine its nature.

6. In an abortion at four months the embryo has escaped, leaving the placenta and membranes in utero. What would be your line of practice in this case?

7. Give the diagnosis, physical and general, between a case of twins and a "cross birth."

8. You have a case of tedious labour (not depending on rigidity of the os uteri), in which dilatation is advancing slowly and unsatisfactorily. How would you manage such a case; and are there any conditions in which it might be desirable to rupture the membranes before the dilatation has made much way?

9. Describe the mechanism, diagnosis, prognosis, and general management of face presentations.

10. In cases of uterine hæmorrhage which may require temporary mechanical arrest, what are the circumstances under which the use of the tampon or plug is indicated; and those under which it should be avoided?

J. (R.) HARVEY, A.B., M.D., *Professor.*

PATHOLOGY.—FOURTH YEAR SCHOLARSHIP.

1. Enumerate the sources of blood-poisoning.

2. Specify the causes of partial paralysis and reflex paralysis.

3. What is the condition of the brain in different forms of fever and the symptoms resulting from such state?

4. Illustrate in the case of tubercular consumption what you mean by the essential, pre-disposing, and exciting cause of disease.

5. What distinction would you make as to different forms of hyperthrophy of an organ?

6. Describe the state of the blood and condition of the blood-vessels in the first stages of inflammation.

7. Enumerate the causes of hæmorrhage.

8. State the various forms of cancer and the prevalent index of each form.

9. Specify the causes of dropsies.

10. Enumerate the causes of epilepsy.

11. Describe the condition of the lungs in the three stages of pneumonia.

12. What are the effects of pleuritic effusion on the chest walls and lung of the affected side?

DENIS W. O'CONNOR, A.B., M.D.

Appendix D.

Examination Papers for Scholarships.

SURGERY.—MEDICAL SCHOLARSHIP.

1. During the process of inflammatory production, what are the changes of the local circulation, what of the local blastema, and what of the local growth?

2. What are Rokitansky's and what Virchow's views as to the origin of pus? Describe the different kinds of it; also the nature and symptoms of an acute abscess, and the treatment?

3. How does pyæmia differ from hectic fever? Describe the pathology of each.

4. Describe the symptoms of dislocation of the hip joint on the dorsum ilii, the structures injured, and different methods of treatment; also in what cases it resembles fracture of the neck, of the thigh bone, and the different forms of this injury, their pathology and treatment.

5. Give a description of the different morbid appearances found in the coats of arteries, and how they produce aneurism; enumerate the different forms of this disease, and the appropriate treatment for each.

6. Enumerate the causes of perineal abscess in both sexes, the symptoms and results; also the appropriate treatment in the different varieties and stages.

7. Describe the different kinds of inguinal hernia, the anatomical relations of oblique inguinal hernia, and a minute description of the several methods of treatment for the reducible and strangulated forms, with the symptoms and effects of each.

8. How would you distinguish between contusion, concussion, and compression of the brain? Detail the pathology of each.

9. Describe accurately the different operations for the removal of cataract by extraction, and when they should be combined with Tredectomy.

PROFESSOR TANNER.

PRACTICAL ANATOMY.—SCHOLARSHIP OF THE THIRD YEAR.

1. Describe the articular surfaces of the bones and ligaments of the ankle joint.

2. Describe the origin, insertion, and relations of the soleus muscle.

3. Describe the spermatic canal, and the abdominal rings.

4. Describe the origin, course, and relations of the external carotid artery.

5. Describe the trunk and branches of the arteria profunda femoris.

6. Describe the specimens placed before you.

PRACTICAL ANATOMY.—SCHOLARSHIP OF THE FOURTH YEAR.

1. Give a description of the several parts in the immediate vicinity of the seat of femoral hernia.

2. Describe the position, relations, size, and structure of the prostate gland.

3. Describe the serous and fibrous tunics of the testis.

4. Describe the articular surfaces of the bones and ligaments of the knee joint.

5. Describe the origin, course, and relations of the trunk and branches of the internal pudic artery.

6. Describe the specimens placed before you.

J. H. CORBETT.

ANATOMY AND PHYSIOLOGY.—SCHOLARSHIP OF THE SECOND YEAR.

1. Describe the position, connexions, and disposition of the fibrous and serous parts of the pericardium.
2. Describe the relations and connexions of the right auricle of the heart; next open into it and state the arrangements of its internal parts.
3. Describe the general and microscopic characters of muscular tissue.
4. Describe the structure of a vein.
5. Describe the impulse and sounds which accompany the action of the heart.
6. State the source, nature, and composition of the gastric juice, and its office in the digestive process.

ANATOMY AND PHYSIOLOGY.—SCHOLARSHIP OF THE THIRD YEAR.

1. State the characters distinguishing the duodenum, jejunum, and ilium intestines.
2. Describe the course, relations, and structure of the oesophagus.
3. State the origin, course, relations, and branches of the glosso-pharyngeal nerve.
4. Describe the spinal cord and the roots of the spinal nerves.
5. Give an outline of the function of the liver, the composition and use of the bile.
6. Give an outline of the respiratory movements, the aerial capacity of the chest, and of the changes in the composition of the respired air.

ANATOMY AND PHYSIOLOGY.—SCHOLARSHIP OF THE FOURTH YEAR.

1. Describe the origin, course, and connexions of the optic nerve.
2. Describe the choroid coat of the eye, and the ciliary processes.
3. Describe the nasal cavities, the passages communicating with them, the arrangement of the mucous membrane and the distribution of nerves upon it.
4. Describe the vocal cords and the arytenoid cartilages.
5. Describe the structure of the lymphatic glands, and the phenomena of lymphatic and lacteal absorption.
6. State the functions discharged by the medulla oblongata.

J. H. CORBETT.

MEDICINE.—SCHOLARSHIPS OF THIRD YEAR.

1. Describe the properties and action of foxglove; give its latin name, preparations, indications, contra-indications, action, uses, and doses.
2. To what natural family does gentian belong? What are its actions, uses, preparations, and doses?
3. How is the pulvis ferri distinguished from the magnetic oxide?
4. How are quinia, cinchonia, and quinidia distinguished from each other?
5. How do tartar emetic and hippo differ in action as emetics?
6. Describe the physiological action and therapeutical uses of arsenic.
7. What are the adulterations to which sulphate of quinine is liable? How are they to be detected?

Appendix D.

Examination Paper for Scholarships.

MEDICINE.—SENIOR SCHOLARSHIPS.

1. What changes do medicinal substances undergo in the mouth? What in the stomach?

2. When are diuretics, when diaphoretics, to be used for the purpose of removing dropsical effusions?

3. Give a general outline of the therapeutical use of tonics.

4. How are expectorants classified? How does each class act?

5. What are the indications for the use of iron?

6. On what grounds is the use of stimulants advocated in inflammatory affections?

7. How do emetics differ in their action? What are the indications for their use?

PROFESSOR PURCELL O'LEARY, *Examiner.*

EQUITY (STOREY).—SCHOLARSHIP OF THIRD YEAR.

1. In what three classes of cases do questions of "satisfaction" usually come before Courts of Equity?

2. In reference to the constructive ademption of legacies by a subsequent provision made for the same party, in what manner does the rule of construction adopted by Courts of Equity differ in the case of parent and child from the case of a legacy to a stranger? State the principle of this. (Storey, 1118.)

3. Explain the doctrine of "election" in equity, and say when a party elects to take against a will, can he to any and what extent take a benefit under the will?

4. What kind of trust does a conveyance without consideration create; and what maxim of equity is applied in such a case?

5. Under what head of equity jurisdiction are "bills of discovery," "bills to perpetuate testimony," and "to take testimony *de bene esse*" classed?

6. A is surety for B in a bond executed by both for payment of money to a creditor. C afterwards executes another bond as a further security for payment of the debt. A is compelled to pay it. Is there contribution between A and C?

7. Give instances of two grounds on which a Court of Equity will enforce the specific delivery of chattels personal, and state the principle applicable to each. (Storey, 709.)

8. Distinguish between the jurisdiction of the Lord Chancellor over infants, and lunatics and idiots.

9. What contracts of a married woman are capable of being made charges on her separate estate?

10. Upon the assignment of equitable interests other than equitable estates, what element is necessary to give the assignment validity, as against whom, and on what principle? Give an example.

11. Upon what grounds does equity exercise jurisdiction in cases of partnership?

12. Upon what ground are Courts of Equity enabled to treat a deed framed as an absolute conveyance of land, as a mortgage, where the condition of defeasance rests in parol merely?

13. Give an instance of an estoppel in equity.

LAW OF PERSONAL PROPERTY.—SCHOLARSHIP OF SECOND YEAR.

1. What is the effect of the 3rd section of the Act of the 14th and 15th of the Queen, on the rights of agricultural tenants to fixtures; and what are its enactments in reference to emblements?

2. Specify the modes of alienation of personal chattels. What are the requisites of a valid sale of goods of the value of ten pounds and upwards? And if by bill of sale, what formalities must be observed to render the sale valid against assignees in bankruptcy or execution creditors of the grantor?

3. How is property in a ship transferred?

4. How are personal actions classified?

5. *Actio personalis moritur cum personâ.* State two exceptions to this maxim, and refer to the statutes by which they were introduced, and describe the persons in whose favour they operate.

6. What is meant by "liquidated damages" for a breach of contract?

7. Distinguish between the liability of the acceptor of a bill of exchange, and the maker of a promissory note, and the liability of the drawer, or payee after indorsement.

8. How are contracts classified?

9. How are debts classified?

10. State the proceedings under "a judgment debtor summons" in the Court of Bankruptcy.

11. State some of the enactments of "The Limited Liability Act, 1855;" "The Joint Stock Companies Acts, 1856," and "The Companies Act, 1862," and specify what a memorandum of association must contain, whether limited or unlimited.

12. Define copyright. What powers are conferred by the Acts of the 7 & 8 Vic., c. 12, sections 2, 3, and 4, and 25 & 26 Vic., c. 68, section 12, being the Acts passed to amend the law of international copyright?

13. What is the effect of the exercise of a power of appointment by a father in favour of a child in a manner securing a benefit to the appointor himself?

14. Upon what securities are trustees usually empowered in settlements of personal property to invest the trust funds; and what enactment enables them to invest upon real securities in Ireland?

15. Distinguish between an executor and administrator. What is meant by "an executor *de son tort*," and by "an administrator *de bonis non*"?

16. What is meant by "*bona notabilia*"?

17. What is "*market overt*," and what is the effect of a purchase in market overt?

18. State, generally, the effect of the statute of distributions upon the elative shares of the widow, the children, and next of kin of an intestate.

EQUITY.—SCHOLARSHIP OF SECOND YEAR.

1. Explain how equity jurisprudence, as administered in our Courts of Equity, is not synonymous with natural justice, and to what extent, and in what form, it partakes of it.

2. Upon what principle does a Court of Equity decline to interfere against a *bona fide* purchaser for valuable consideration, without notice of the adverse title?

3. The subject of Equity Jurisprudence has been treated under the several heads of "Remedial," "Executive," "Adjustive," "Protective," and "Auxiliary." Give instances of the general objects sought to be effected by the relief afforded under each head respectively.

4. A "chose in action" is not generally assignable at law; what precautions should be observed in order to give the assignee of a chose in action a complete title in equity. Give examples.

Appendix D.

Examination Papers for Scholarships.

5. What is the order of administration of different properties, being assets, in payment of the debts of a deceased person, and how are they applied for that purpose?

6. When is a stipulation in a mortgage deed, that a mortgagee shall receive at £4 per cent. if regularly paid, but £5 per cent. (if default be made) good.

7. Upon what principle of equity is the doctrine of marshalling of securities founded?

8. Give instances of the purposes for which a Court of Equity regards husband and wife as distinct persons.

9. Upon what statute and orders does the present system of Chancery practice mainly depend; and how is a suit in equity commenced?

REAL PROPERTY AND CONVEYANCING.—SCHOLARSHIP OF FIRST YEAR.

1. For what reason, in conveyances granting an estate for life in land, is the grant usually made for the term of the *natural* life of the grantee?

2. What is *waste?* Distinguish between voluntary and permissive waste. What is the effect of the grant of an estate for life "*without impeachment of waste;* and what kind of waste will the Court of Chancery, administering *equity*, restrain a tenant for life from committing?

3. What kind of estate is created by a grant to a man *and the heirs of his body*, and in what event will it certainly be determined?

4. What are estates in *frank-marriage*, and how were they held?

5. Give an outline of the enactments which have rendered estates held in fee-simple subject, in the hands of the heir or devisee, to *debts* of all kinds contracted by the deceased owner.

6. What is the effect of the 7th rule, or canon, of descent?

7. Explain the doctrine that there cannot be "*a use upon a use*," and state when it was introduced into the law, and the effect of it.

8. For what purpose was the statute of uses employed in the conveyance by "lease and release"?

9. Give an outline of an ordinary purchase deed. To what *ad valorem* and progressive stamp-duty is such a deed subject?

10. Enumerate the several acts by which a will may be revoked.

11. What is the effect of a devise of land to a person who is also heir-at-law of the devisor?

12. What is necessary to render a deed of conveyance by husband and wife of the wife's estate or interest in land effectual?

13. Distinguish between a vested and contingent remainder; and when *must* the latter become vested?

14. Give an example of an "executory use." State the limit of time within which executory interests must take effect.

15. What is an equity of redemption?

16. Give an outline of the most usual limitations in a marriage settlement of a real estate.

APPENDIX E.

Appendix E.

Table giving List of Classes, No. of Lectures, and Students attending same.

TABLE giving LIST of CLASSES, NUMBER of LECTURES, and of STUDENTS attending same in the Session 1869–70.

	No. of Lectures Weekly.	No. of Students.	No. of Lectures.
Greek,	10	33	210
Latin,	9	30	213
English Literature,	3	13	54
,, Language,	3	22	32
History,	3	7	52
French,	9	76	225
Mathematics,	9	40	373
Chemistry,	3	89	67
Practical Chemistry,	7	48	45
Natural History,	3	56	70
Natural Philosophy,	14	78	280
Political Economy,	3	6	27
Metaphysics,	3	3	53
Logic,	3	12	32
Geology and Mineralogy,	3	15	74
Engineering,	12	36	329
Anatomy and Physiology,	5	99	107
Practical Anatomy,	5	79	107
Surgery,	3	32	66
Midwifery,	3	24	58
Materia Medica,	3	52	68
Medicine,	3	20	55
Medical Jurisprudence,	4	23	36
English Law,	9	11	72
Civil Law,	6	7	48

APPENDIX F.

Appendix F.

Form of Circular from President, and special Reports of the Professors.

SPECIAL REPORTS of PROFESSORS with FORM of CIRCULAR from PRESIDENT.

RETURN to be filled up by the Professor of , and to be returned to the Registrar, so filled up, for the official information of the President, on or before the 8th instant, being for the Collegiate Session, 1868–69.

A.—As to the Course or Courses of lectures given by the Professor. 1st. Duration and extent of the Course; number of Terms. 2nd. Number of weeks of Lectures in each Term. 3rd. Number of Lectures weekly, and days and hours of Lectures.

B.—The description or title of the Course or Courses of Lectures delivered, and a general abstract of the subjects of instruction contained in the Course, and the title of the Text-books recommended.

C.—Whether the Lectures are illustrated by reference to maps, diagrams, specimens, or experiments; and a general notice of the kind of illustrations used.

D.—Whether any method of Tutorial, or other special instruction, is employed, as by setting out portions of Text-books for lessons, by themes, or exercises in composition, or problems; and whether Special Class Examinations are held, and at what time; or whether Herborization Excursions, or Field Exercises, are given.

E.—What faculties or division of Students are those attending Courses of Lectures of the Professors making the return?

F.—The number of students attending each Course—distinguishing Matriculated and Non-Matriculated Students; and the general regularity of attendance.

Appendix F.

Form of Circular from President, and special Reports of the Professors.

G.—The general conduct of Students at the Professor's Lectures; and the general state of discipline as regards the Professor's Classes.

H.—The general condition of the department of which the Professor has charge, as to supplies, fitments, cleanliness, and accommodation, for the purposes of instruction.

The Professor, in making the above returns, is requested to mark the answers with the letter designating the portion of the form of return, as above, to which each answer refers.

Signed by order of the President,

R. J. KENNY, *Registrar.*

RETURN OF THE PROFESSOR OF GREEK.

A.—1. The course extends over three terms. 2. The first term consisted of eight weeks; the second, of ten; and the third, of ten weeks. 3. Ten lectures weekly, viz., from 9 to 10 o'clock, A.M., on each day of the week, except Saturday.

B.—The course of Greek language and literature, comprising portions of the works of Homer, Æschylus, Sophocles, Euripides, Demosthenes, Thucydides, Plato, and Xenophon.

C.—The lectures are illustrated by maps and castes from the antique, affixed to the walls of the lecture rooms.

D.—Portions of the text-books are prepared during the intervals between the lectures, accompanied by exercises in prose and verse, according to the proficiency of the students.

E.—The lectures are attended exclusively by students in the Faculty of Arts.

F.—Thirty-six; all matriculated.

G.—The general conduct of the students at lecture was quite satisfactory, and the general state of discipline good.

H.—The supplies, fitments, &c., sufficient.

JOHN RYALL, *Professor.*

March 2nd, 1870.

REPORT OF THE PROFESSOR OF LATIN.

A.—The course extended through three terms. First term, 7 weeks; second term, 10 weeks; third term, 5 weeks. Junior class, four lectures weekly; senior class, three lectures weekly; extra and third year's class, two lectures weekly.

B.—The Latin language. Text-books of lectures:—Junior class: Livy, part of Book XXIII.—Horace Satires, Book II., 4–8. Senior class: Virgil Eclogues, I–VI.; Cicero De Natura Deorum, Book I., 1–20. Extra and third year's class: Tacitus Annals, Book III., 31–76; Terence, part of the Heauton Timorumenos.

C.—The lectures were illustrated by references to the art collections belonging to the College.

D.—The students prepared a portion of the text-book for each lecture; they also wrote Latin Exercises in prose and verse.

E.—Students in Arts.

F.—Thirty-one, all matriculated.

G.—Satisfactory.

H.—Satisfactory.

B. LEWIS.

RETURN OF THE PROFESSOR OF MODERN LANGUAGES for the official information of the President for the Session 1868–69.

A.—1. The courses of instruction extended to three terms; namely, the whole session. 2. Nine weeks during the first term; eleven weeks, the second; and seven, the third. 3. Three lectures weekly, in each class; Mondays, Wednesdays, Fridays, 12 to 3.

B.—The lectures were on French literature, and the Syntax as well as comparative grammar; the text-book as follows:—In the class of medical French: Comte's *Lectures*, Surle's *Sciences*, and Baratte's *Littérature Medicale*. In the senior French: Demogeot's *Historie de la littérature Francaise*, Racine's *Britannicus*, Lafontaine's *Fables*. In the junior French: Demogeot's *Littérature Française*, Racine's *Athalie* and *Esther*.

C.—The lectures are not illustrated by maps, diagrams, &c.

D.—The tutorial method is blended with the professional, exercises and themes being given weekly, and the Mondays being devoted to lectures on literature and comparative grammar.

E.—The students belong to every Faculty in the College, excepting the Faculty of Law.

F.—The number of students was as follows:—In the class of Medical French, 45; in the senior French, 19; in the junior French, 12.

G.—The general conduct of the students was excellent.

H.—The general condition of the rooms, &c., very good.

R. DE VERICOUR.

Queen's College, March 2nd, 1870.

PROFESSOR'S RETURN in HISTORY AND ENGLISH LITERATURE.

A.—1. History; two terms. 2. First term, eight weeks; second term, ten weeks. 3. Three lectures weekly: Monday, Wednesday, Friday, at twelve. English Literature: 1. Two terms. 2. First term, eight weeks; second term, ten weeks. 3. Three lectures weekly: Tuesday and Thursday at twelve, Saturday at eleven. English Language: 1. One term. 2. Ten weeks. 3. Tuesday and Thursday at eleven, Saturday at ten.

B.—History—Europe: 1700–1815. England: 1066–1485. France: 1589–1815. Great Britain and Ireland: 1603–1815. English Literature—Chaucer: Prologue to Canterbury Tales. Shakespeare: Othello. Burke: Thoughts on the Present Discontents, 1770; Reflections on the Revolution in France. History of English Literature from Chaucer to Dryden. English Language—Craik: Outlines of the History of the English Language. Milton: Paradise Lost, I. Shakespeare: Richard III.

C.—The lectures on history are illustrated by Bell's Chronological Tables, and Von Spruner's Maps.

D.—Exercises on English composition are prescribed as Analysis, Translations, and Original Essays.

E.—Arts and Medicine.

F.—History, 7 matriculated. English Literature, 13 matriculated. English Language, 19 matriculated; 1 Non-matriculated.

G.—Good.

H.—Satisfactory.

WILLIAM RUSHTON, *Professor.*

REPORT OF THE PROFESSOR OF LOGIC AND METAPHYSICS.

A.—On Logic and Metaphysics.—1. Logic, one term; Metaphysics, two terms. Logic, Tuesdays, Thursdays, at 11 o'clock; and Saturdays at 9 o'clock. Metaphysics, Tuesdays and Thursdays, at 1 o'clock; Saturdays, at 10 o'clock.

Appendix F. — Reports of the Professors.

B.—Logic, Deductive and Inductive—Aldrich, parts of Mill, Baynes, and Thompson. Metaphysics: History of Philosophy and Psychology.

C.—No illustrations are used except such as are drawn or written on the board during the course of the lectures.

D.—Both the tutorial and professorial systems are used.

E.—Logic, second year's students in Arts; Metaphysics, third year's students in Arts.

F.—Logic, 12; Metaphysics, 6. All matriculated; attendance very satisfactory.

G.—Conduct of the students in the class-rooms unexceptionable.

H.—The general accommodation and condition of the rooms was satisfactory.

G. S. READ.

REPORT OF THE PROFESSOR OF MATHEMATICS FOR SESSION 1868–69.

A.—1. The course consisted of three terms.

2. The first term contained 8 weeks, the second 10 weeks, and the third 6 weeks.

3. The regular lectures were delivered on Monday, Wednesday, and Friday, at 12–1, for 1st year; 2–3, for 2nd year; 11–12 for third year.

There were also during the second term and part of the first additional lectures to first year's students on Tuesday and Thursday, from 12 to 1, and also from 1–2.

B.—Subjects of lectures were:—1, *First year*—Euclid, Algebra, Trigonometry. 2. *Second year*—Theory of Equations. Spherical Trigonometry. Properties of Elementary Solid Figures. Analytical Geometry, Differential and Integral Calculus. 3. *Third year*—Solid Geometry, Differential Equations, Calculus of Variations.

The text-books recommended were:—Euclid, Todhunter's Algebra, Trigonometry—(1. Plane—2. Spherical), Conic Sections, Differential and Integral Calculus. Salmon's Conic Sections and Solid Geometry. Poole's Differential Equations. Todhunter's Theory of Equations.

C.—No special illustrations.

D.—The lectures, except those on Euclid, were to a certain extent independent of text-books. Problems were set at each lecture, and frequent *viva voce* examinations held. There were also written examinations at natural divisions in the course.

E.—The students attending the lectures belonged to the Arts and Engineering Faculties.

REPORT OF THE PROFESSOR OF NATURAL PHILOSOPHY.

A.—Six courses. 1. Each, 3 terms. 2. In the first term, 7 weeks; in the second, 10 weeks; in the third, 5 weeks. 3. In the senior class of Experimental Physics and the Honor Class in Mathematical Physics, 3 lectures were delivered in each week; in each of the other classes 2 lectures in each week.

B.—In the classes of Experimental Physics the subjects were—Mechanics, Hydrostatics, Heat, Light, Electricity, Magnetism, and Acoustics. In Mathematical Physics—Mechanics, Hydrostatics, Optics, and Astronomy. In Applied Mechanics—Practical Mechanics and Theory of the Steam Engine. Text-books—Ganôt, "Traite de Physique," Todhunter's "Statics," Tait and Steel's "Dynamics of a Partule," Routh's "Rigid Dynamics," Brinkley's "Astronomy," Parkinson's "Optics," Twisden's "Practical Mechanics," De Pambour's "Theory of the Steam Engine."

C.—The lectures were illustrated by experiments and diagrams.

D.—In Mathematical and Engineering Physics the tutorial method was used and problems proposed as exercises.

E.—The senior class of Experimental Physics was attended by students of the second year in Arts and the second year in Engineering. The Honor course in Mathematical Physics by students of the third year in Arts and in Engineering; the class of Applied Mechanics by students of the third year in Engineering; the junior class of Experimental Physics by students of the first year in Medicine.

F.—Senior class of Experimental Physics, 17; junior, 50; Mathematical Physics (Honor), 4; Mathematical Physics (Engineering), 5; Applied Mechanics, 9; Physics (Honor), 2. The attendance was regular.

G.—The conduct of the students was satisfactory.

H.—The arrangements for carrying on the business of the department were satisfactory.

JOHN ENGLAND.

REPORT OF THE PROFESSOR OF CHEMISTRY.

A.—First course of 3 terms; first term of 7 weeks; second of 10 weeks; and third of 5 weeks. Three lectures per week, on Monday, Wednesday, and Friday, from eleven to twelve.

B.—First course; Systematic Chemistry, embraced the laws of combination; history of metallic and non-metallic substances; theories of organic Chemistry, and description of organic compounds, and an account of the latest views of Chemical doctrines. Text-books—Fownes, Williamson, Roscoe, Miller, Graham, Kane.

C.—Illustrated by diagrams, specimens, and experiments.

D.—In the first course by lectures, and after each lecture by discussion and explanation of difficulties with the students. In the second course, each student works under the superintendence of the Professor.

E.—Students of Medicine, Engineering, and a few from the Faculty of Arts. Medical students alone attend the second.

F.—In the first, 64 matriculated, and 5 non-matriculated; and in the second, or Practical Chemistry, 44 matriculated, and 4 non-matriculated. The general attendance was good.

G.—The general conduct was good.

H.—The department is fairly provided with supplies, fitments, and apparatus for instruction. The pressure of gas is still extremely defective, and at times so low as to impede work in the laboratory. A separate holder arranged for increase of pressure should be erected.

J. BLYTH, M.D.

REPORT OF THE PROFESSOR OF NATURAL HISTORY.

A.—One course on Zoölogy and Botany. 1. The course consisted of 70 lectures, and extended over 3 terms. 2. The first term included 8; the second, 9; and the third, 7 weeks of lectures. 3. Three lectures weekly, at 3 P.M., on Monday, Wednesday, and Friday.

B.—The course included lectures on the principles of Zoölogy and Botany, and on the Structure and Classification of Plants and Animals. The text-books used were Milne Edwards' Zoölogy, Dallas' Natural History of the Animal Kingdom, Henfrey's Elementary Course of Botany, and Oliver's Lessons in Elementary Botany.

C.—The lectures were illustrated by means of specimens and diagrams. Herborizations were given during the third term.

D.—The professorial method of instruction was chiefly employed.

E.—The lectures were attended by students of the third year in Arts, and of the first year in Medicine.

F.—Five students in Arts, 43 in Medicine, and 8 non-matriculated

Appendix F. — Reports of the Professors.

students were present during the course. Six of these attended *diligently*, 45 *duly*, while 5 were disqualified for insufficient attendance.

G.—Good.

H.—As stated in last year's report. Application has been made to the Board of Works in regard to the better heating, lighting, and ventilation of the lecture-room.

J. Reay Greene.

Report of the Professor of Geology and Mineralogy for the Session 1868–69.

A.—The course extended over three terms—the first included 8 weeks, the second 11, and the third 7 weeks. The number of lectures in each week being three, and the days on which these were delivered being Tuesdays, Thursdays, and Saturdays, the total number of the course was 74.

B.—The title of the course was Lectures on Geology and Mineralogy, which included also Physical Geography, and Palæontology. The text-books referred to were Hughes' Outlines of Physical Geography, Somerville's Physical Geography, Herschell's Physical Geography, Lyell's Elements and Principles of Geology, Murchison's Siluria, Jukes' Manual of Geology, Owen's Palæontology, and Nicols' Manual of Mineralogy.

C.—The lectures were illustrated by maps, sections, diagrams, and specimens.

D.—The instruction was professorial, and full instructions were given in Practical Geology towards the end of the course.

E.—The students attending the course were principally Engineering. There were also three Arts students, and one Medical.

F.—The number attending the course was 14, the whole being matriculated students.

G.—The conduct of the students during lectures was, in every respect, good.

H.—As regards fitments and other requisites, and as concerns cleanliness and accommodation, these are in all points what the Professor could require.

Robert Harkness.

Return of Professor of Civil Engineering.

A.—1. Each course of lectures extends through three terms. 2. In the first term, 9 weeks; in the second term, 11 weeks; in the third term, 7 weeks. 3. Three lectures per week in each course. Students of first year, Monday, Wednesday, Friday, 10, A.M.; second, Tuesday, Thursday, Saturday, 10, A.M.; third year, Monday, Wednesday, Friday, 12, noon. Office open Tuesday, Thursday, Saturday, 10, A.M., to 2, P.M.

Total number of lectures :—

Students of first year, . . .	66
,, second year, . . .	67
,, third year, . . .	68
Office, ...	65
Total, . .	266

B.—*First year.*—Descriptive Geometry; Orthographic Projection; Shadows; Isometric Projection; Perspective; Principles of Architecture; Geometry of the Oblique Bridge. Text-books :—Hall's Descriptive Geometry; Engineer and Machinist's Drawing Book; Rickman's Architecture; Buck on the Oblique Bridge. *Second year.*—Surveying, Levelling, and Mensuration. Text-books :—Rankine's Civil Engineering; Cotton's Manual of Railway Engineering; Williams' Geodesy. *Third year.*—

Materials used in Construction; Principles of Construction of Bridges, Roads, Railways, Canals; Hydraulic Engineering; Strength of Materials; Principles of Construction of the chief machines employed by the Engineers. *Drawing office.*—First year students are chiefly employed in drawing the problems given at lectures, and a few easy examples of their application. The second and third year's classes in making working drawings of examples of the subjects of lectures, and in mapping.

C.—Illustrated by reference to maps, drawings, and instruments.

D.—The tutorial and professorial methods of instruction are adopted, according to the subject of the lecture. Instruction is given in the field.

E. Students in the department of Civil Engineering?

F. Students of first year, .	.	Mat.	10	. Non. Mat.	0
„ second year,	.	„	6	. „	0
„ third year,	.	„	18	. „	0
Office, ...		„	1	. „	0
			35		0
Less, two attending two years,		„	2		
Total number of students,		.	33		

The majority of the students have attended tolerably regularly.

G. Conduct of students very good.

H. General condition of department good.

ALEXANDER JACK,
Professor of Civil Engineering.

A.—1. Political Economy, 26 lectures; 2 terms. 2. Jurisprudence, 24 lectures; 2 terms. 3. Civil Law, 24 lectures; 2 terms.

B.—Political Economy—Rent, profit, and wages; commerce, taxation, currency, and banking. Text-books—J. S. Mill, Fawcett, Senior, Mills. Jurisprudence—Selections from Maine, Stephens, and other writers, with the lectures of the Professor. Civil Law—Sandars' Justinian.

C.—No.

D.—The tutorial and professorial methods are both employed.

E.—In Political Economy, Arts Students; in other subjects, Law Students.

F.—In Political Economy, six. In Civil Law, five. In Jurisprudence, three. All matriculated.

G.—Very good.

R. H. MILLS.

19th March, 1870.

REPORT of the PROFESSOR of ANATOMY and PHYSIOLOGY.

A.—Two courses delivered daily (Saturday excepted) during the Medical Session—one Anatomy and Physiology; the other course, Anatomical Demonstrations and Practical Anatomy. The dissections performed by the students were superintended by the Professor of Anatomy and his assistants, Doctors Shinkwin and Jones. Anatomy and Physiology at one o'clock; Demonstrations at twelve o'clock.

The course of Anatomy and Physiology comprehends the following subjects:—1. Nature of life and organization; general description of the vital functions; general and special description of the textures of the human body; development of tissues and other branches of Histology; composition of the fluids—viz., the blood, lymph, chyle, saliva, gastric juice, bile, &c. 2. Physiological Anatomy of the organs of support and locomotion, circulation, respiration, digestion, chylification, absorption, secretion, excretion, reproduction; the brain and its membranes; the spinal cord and membranes; the ganglia and nerves; the organs of

Appendix F. Reports of the Professors.

touch, smell, vision, hearing, taste; organ of voice, &c. 3. The course comprehends all branches of human Physiology; various subjects comprised in it are elucidated by reference to Comparative Anatomy and Physiology.

The Course of Structural Anatomy is illustrated by microscopical preparations, &c.

The course of Anatomical Demonstrations includes the special description of the bones, joints, ligaments, arteries, veins, membranes, and fasciæ; it also embraces Regional and Surgical Anatomy.

The text-books are the following, viz:—Todd and Bowman on Physiological Anatomy; Carpenter's Physiology; Kirke's Handbook of Physiology; Valentin's Physiology; Quain's Anatomy; Harrison's Anatomy; Wilson's and Gray's Works; Ellis's Demonstrations; Corbett on the Arteries, &c.; Kölliker and Hassal on Microscopic Anatomy.

C.—The lectures are illustrated by recent and prepared dissections, by plates, diagrams, anatomical preparations, &c.

D. The students are examined *viva voce* upon subjects treated of in the course. Written replies to questions proposed are always received at the examinations held in October for Medical Scholarships, and at the Sessional Examinations in the third term.

E.—By Students of Medicine and Surgery.

The course of Anatomy and Physiology was attended by 97 students, 88 matriculated and 9 non-matriculated.

The course of Demonstrations and Practical Anatomy by 82 students.

G.—The students have attended the lectures with great regularity, and their conduct was exceedingly good.

H.—The Anatomical preparations, plates, charts, &c., are very good, but there is much necessity for additions to the Anatomical Museum.

Accommodation has recently been much improved; the apartments are kept in a state of cleanliness.

J. H. Corbett.

Return of the Professor of the Practice of Physic, for the information of the President, Session 1868–69.

A.—Lectures on the Practice of Physic, consisting of three terms—first term lasts seven weeks; the second and third vary with the time of Easter. Three lectures each week from three to four o'clock.

B.—Practice of Medicine subjects those generally comprised in such a course.

C.—Illustrated by reference to plates and morbid specimens.

D.—Examinations are held occasionally.

E.—Faculty of Medicine.

F.—Twenty matriculated students; attendance very regular.

G.—Conduct and discipline excellent.

H.—There is still a want of morbid specimens, which are difficult to obtain.

Denis Charles O'Connor, M.D.,
Professor of the Practice of Physic.

March 15th, 1870.

Return made by the Professor of Surgery of Q.C.C., for the President. March 3rd, 1870.

A.—Lectures commenced on the 2nd of November, and extended over three terms, on every Tuesday, Thursday, and Saturday, from four until five o'clock, P.M.

B.—Theory and Practice of Surgery. Text-books—Erichsen's "Practice of Surgery," Cooper's "Surgical Dietaries," Holmes' "Surgery."

C.—Lectures illustrated by operations on the dead subject, plates, diagrams, specimens.

D.—Occasional examinations.

E.—The Medical Faculty.

F.—Forty-four matriculated students; general attendance very good.

G.—General conduct and discipline of students unexceptionably very good.

H.—A deficiency in the fitments, and lecture-room objectionable in some respects.

W. K. TANNER, *Professor of Surgery*, Q.C.C.

REPORT of the PROFESSOR of MATERIA MEDICA.

A.—One six months' course. Three lectures weekly, on Tuesdays, Thursdays, and Saturdays, from 3 to 4 P.M.

B.—Lectures on Materia Medica and Therapeutics, comprising general Jamatology, Pharmacognosy, Pharmaco-dynamics, Pharmacy, Formulation, Posology, Hygienics, and Balneology. Text-books—The works of Pereira, Garrod, Frazer, Trousseau, and Pidoux.

C.—Illustrated by diagrams, chalk drawings on the board, and microscopical demonstrations.

D.—By microscopical demonstrations and exhibition of specimens of the Materia Medica.

E.—Students of the Medical Faculty.

F.—Forty-three students.

G. Conduct unexceptionable; attendance most exact.

H.—Lecture-room unfitted. Fireplace and windows wrongly placed. Great want both of materials and apparatus, as well as of a special porter to assist in preparing the experiments.

PURCELL O'LEARY, B.L., A.M., M.D.

RETURN of the PROFESSOR of MIDWIFERY for the SESSION 1868-69.

A.—Course of lectures on Midwifery.

1. Six months—from November to April.

2.

3. Three lectures weekly—Monday, Wednesday, and Friday, at four o'clock.

B.—Midwifery. Physiology of the functions of reproduction and gestation. Parturition in its various bearings, theoretical and practical. Diseases of childbed. Management of infants.

C.—Diagrams, casts, models, anatomical and other preparations, &c.

D.—Occasional examinations.

E.—Students of the Faculty of Medicine.

F.—Matriculated, 24; non-matriculated, 2. General attendance good.

G.—Conduct of the students very good.

H.—Supply of preparations, &c., for the illustration of the lectures still very deficient.

J. R. HARVEY, A.B., M.D.

REPORT of the Class of MEDICAL JURISPRUDENCE.

A.—Three months, during which 36 lectures were delivered. The days of lecture were Tuesday, Thursday, and Friday.

B.—The subjects enlarged upon were toxicology, the rules of evidence

Appendix F.
Reports of the Professors.

in legal procedure, infanticide, wounds, insanity, &c. The text-books—Taylor, Guy, Beck; Paris and Fonblanque were also recommended for perusal by the students. The leading cases were referred to; for example, Lord Ferrer's case, the Duchess of Kingston's case, Hadfield's case, the Gardner and Douglas Peerage, &c.

C and D.—By lectures and by experiments when required.

E.—Students of the Faculty of Medicine.

F.—There were 33 matriculated and 2 non-matriculated students in the class.

G.—The attendance, conduct, and discipline of the class were excellent.

H.—The class continues dependent on the Chemical department for apparatus and the materials necessary for the toxicological portion of the course.

J. BLYTH, M.D.

Appendix G.

APPENDIX G.

List of successful Candidates.

LIST of UNIVERSITY DEGREES, DIPLOMAS, and HONORS obtained by STUDENTS of QUEEN'S COLLEGE, CORK, at the COMMENCEMENTS in JUNE and OCTOBER, 1869.

DEGREE OF M.D.

Unclassed:
- Philip Cogan.
- Michael Cullinan.
- John W. Davis.
- John F. Enright.
- William Joseph Hastings.
- John R. Hayes.
- Francis Healy.
- Michael Kearney.
- James John MacNamara.
- Daniel Nicholas Martin, B.A.
- Alexander S. Merrick.

Unclassed—*continued.*
- John H. Nason.
- Francis Nunan, B.A.
- Augustine D. O'Connor.
- Matthew D. O'Connell.
- Thomas E. O'Donnell.
- Frederick H. Smyth.
- James L. Sweetnam.
- William F. Sweetnam.
- William Starkie, B.A.
- Alexander Tronsdell.

(D)

DEGREE OF M.A.

First Class:—
Joseph O'Brien, first in Ancient Classics.

Second Class:—
Matthew J. Bourke, second in Modern Languages.
Benjamin Hamilton, second in Ancient Classics.
John Marshall, second in Ancient Classics.

Third Class:—
Michael Maloney, third in English, History, and Political Economy.

DEGREE OF M.CH.

- J. M'Mahon Brown, M.D.
- Philip Cogan, M.D.
- Michael Cullinan, M.D.
- Timothy Crowley, M.D.
- Humphry J. Donovan, M.D.
- John F. Enright, M.D.
- John R. Hayes, M.D.
- William J. Hastings, M.D.
- Francis Healy, M.D.
- Michael Kearney, M.D.
- Daniel Martin, M.D.
- Mathew D. O'Connell, M.D.
- Augustine D. O'Connor, M.D.
- Michael O'Malley, M.D.
- Thomas O'Sullivan, M.D.
- James L. Sweetnam, M.D.
- William F. Sweetnam, M.D.

Appendix G.

List of successful Candidates.

DEGREE OF B.A.

First Class:—
Michael Finucane, first in Ancient Classics.

Second Class:—
Henry C. Heazle, second in Ancient Classics.

Third Class:—
James Robert Brett, third in Ancient Classics.
John Chestnut, third in English History, and Political Economy.
James Magill, third in Experimental Science.
Thomas D. Rearden, third in Logic, Metaphysics, and Political Economy.

Unclassed:—
Henry Corly.
George Humphrys.

DEGREE OF BACHELOR IN ENGINEERING.

First Class:—
James Moran.
Benjamin Parkes.

BACHELORS IN ENGINEERING.

Unclassed:—
Alfred G. Dann, B.A.
Cecil Gabbott.

FIRST UNIVERSITY EXAMINATION IN MEDICINE.

Third Class:—
Richard William Coppinger.
John Adderly.
John Ambrose.
Richard John Barry.
William E. D. Charters.
Michael Corbett.
William Derham.
Benjamin Derham.
Thomas Derham.
Thomas H. Gilltman, B.A.
Charles H. Haines, B.A.
Richard J. Hare.
Christopher Lloyd.
Martin MacDonnell.

Third Class:—
John Mountain.
Joseph O'Brien, M.A.
Patrick C. O'Brien.
Bernard O'Connor, B.A.
David W. O'Connor.
Thomas A. O'Donnell.
Richard F. O'Neill, B.A.
Richard Ryan.
William R. Tolerton.
Francis J. Tuohy.
George Vickery.
David J. Walshe, B.A.
John Wheeler.
Joseph Wilson.

APPENDIX H.

Appendix H.

Report of the Librarian.

SPECIAL REPORT of the LIBRARIAN.

The number of volumes in the Library at the date of this Report, May 20th, 1870, is 19,138. They may be classified as nearly as possible as follows:—

Pure Mathematics,	719	European Literature,	1,525
Mixed do.,	593	Celtic Literature,	63
Chemistry,	967	History, Antiquities, &c.,	2,564
Geology, &c.,	640	Biography,	550
Botany and Zoology,	1,507	Geography, Travels, &c.,	604
Medical Sciences,	2,208	Engineering,	494
Theology & Ecclesiastical History,	330	Agriculture,	212
Logic,	425	Fine Arts,	195
Political Economy and Jurisprudence,	542	Bibliography,	99
Education,	187	Encyclopædias, &c.,	630
Law,	839	Total,	19,138
Ancient Classical Literature,	1,907		
English Literature,	1,338		

The library is largely availed of by the students, whose conduct and demeanour are excellent. I have had no occasion to report a breach of discipline during the past session.

Appendix H.

Report of the Librarian.

I miss three volumes from the library and fear they are lost. Considering the extent to which the library is used by over two hundred students, and the very great freedom with which they are allowed to consult and borrow the books, this loss for the year is very trifling.

With this exception there has been no loss to any description of library property.

The catalogues of both departments (the lending and consulting) are now completed.

The number of books presented has been unusually small.

Cleanliness and order are properly attended to.

The College booksellers, Messrs. Hodges and Foster, continue to execute our orders with their usual promptitude and accuracy.

MATTHIAS O'KEEFE, *Librarian.*

Appendix I.

APPENDIX I.

Copies of Accounts furnished by Bursar.

COPIES of the several ACCOUNTS furnished by the BURSAR, showing the FINANCIAL POSITION of the College to 31st March, 1870.

ACCOUNT of EXPENDITURE of the ANNUAL PARLIAMENTARY GRANT of £1,000 for the Year ending 31st March, 1870.

DR.	£	s.	d.
To amount of Grant received from the Paymaster-General,	1,000	0	0
,, amount received on account of College fees and fines,	62	15	0
By Balance to credit of Bursar, year's grant,	139	14	4
	£1,202	9	4

CR.			
To Balance to credit of Bursar from previous year's account,	20	9	0
,, Expenditure on the several College Departments:—			
1. Ancient and Modern Philology and Literature,	95	1	9
2. Mathematical, Physical, and Chemical Sciences,	117	11	6
3. Natural Sciences,	102	5	11
4. Engineering,	33	12	3
5. Medical Sciences,	100	17	11
6. Metaphysical, Legal, and Economic Sciences,	39	9	9
7. Printing, Stationery, Advertising, Postage, and Office Expenses,	223	11	8
8. Heating and Lighting,	240	19	10
9. Botanic Garden and Grounds,	228	9	9
	£1,202	9	4

GENERAL ABSTRACT of the ACCOUNT of the PRESIDENT OR VICE-PRESIDENT, and BURSAR, of QUEEN'S COLLEGE, CORK, from 1st April, 1869, to 31st March, 1870.

DR. HEAD OF SERVICE (RECEIPTS).	£	s.	d.
To Balance on the 1st April, 1869,	1,747	15	3
,, Amount received from Paymaster of Civil Services,	8,319	10	2
,, Fees and Fines,	62	10	0
	£10,129	15	5

CR. HEAD OF SERVICE (PAYMENTS).			
By amount paid for Salaries,	5,819	13	8
,, ,, ,, Scholars and Prizes,	1,159	11	8
,, ,, ,, for Porters and Servants,	335	2	0
,, ,, ,, Additional Grant,	1,182	10	5
Balance indebted on 31st March, 1870,	1,632	17	8
	£10,129	15	5

Signed, E. M. FITZGERALD, *Bursar.*

APPENDIX K.

Reports of Vice-President and Deans of Residences.

REPORT OF THE VICE-PRESIDENT ON DISCIPLINE, AND REPORTS OF THE DEANS OF RESIDENCES FOR THE SEVERAL RELIGIOUS DENOMINATIONS.

VICE-PRESIDENT'S RETURN.

A.—The several departments of the College were in an efficient state.

B.—The order and discipline in the College were satisfactory—no breach of discipline having occurred which called for the intervention of the Council.

JOHN RYALL.

March 2, 1870.

REPORT of DEAN of RESIDENCES for STUDENTS of the ESTABLISHED CHURCH.

2, South Terrace, Cork,
March 2, 1870.

SIR,—I beg leave to acknowledge the receipt of a letter from you in which you state that you are requested by the President of the Queen's College, Cork, to ask me for my annual report on the conduct of the students under my charge. In reply I regret to say that the Council again refused last year to allow any religious instruction inside the walls of the College. The consequence of course is, that so far as the authorities of the College are concerned none of the students can be regarded as under my charge.

There are over one hundred students who belong to the Church of Ireland, and yet there is but one small house licensed in Cork for their residence. I do not consider it is any part of my official duty to make any statement of the private efforts I make to give religious instruction to the students, nor of the behaviour of those students who may avail themselves of these efforts. I still consider it a great hardship that the office of Deans of Residences should be continued without giving the Deans any opportunity of performing the duties of their office. I know of course that the whole responsibilty of this rests upon the Council of the College.

I have the honour to be, Sir,
Your obedient servant,
GEORGE WEBSTER, D.D.

R. J. Kenny, esq., *Registrar.*

REPORT of DEAN of RESIDENCES for STUDENTS of the PRESBYTERIAN CHURCH.

Sir Robert Kane.

SIR,—There were, I believe, eight students belonging to the Presbyterian Church in attendance on the Queen's College, Cork, for the session 1868–69. Their moral conduct was good, and though absorbed in their academic studies they did not neglect their religious privileges and duties.

I am, yours very truly,
WILLIAM MAGILL,
Dean of Residences.

Cork, March 2nd, 1870.

Appendix K.

Reports of Vice-President and Deans of Residences.

REPORT of DEAN of RESIDENCES for STUDENTS of the WESLEYAN CHURCH.

13, Henry-street, Cork,
March 8, 1870.

SIR,—I regret that my report of last year, although sent direct to Sir Robert Kane, does not appear to have been received.

I must again say that the want of a suitable place has prevented me meeting collectively the young gentleman under my care for religious purposes, but I have much pleasure in reporting favourably of their moral character and attendance on public worship.

I am, yours truly,

EDWARD BEST,

Wesleyan Minister.

R. J. Kenny, esq.

Appendix L.

Report of the proceedings of the Triennial Visitation.

APPENDIX L.

REPORT OF THE PROCEEDINGS OF THE TRIENNIAL VISITATION, MAY 25, 1870.

The Triennial Visitation took place on Wednesday, 25th May, 1870. The visitors present were the MARQUESS of KILDARE, the Right Hon. the MASTER of the ROLLS, and Dr. BANKS, President of the King and Queen's College of Physicians.

The proceedings commenced at 11 o'clock, A.M., and were open to the public.

Letters were read from the LORD BISHOP of KILLALOE, from the MODERATOR of the GENERAL ASSEMBLY, and from Dr. MACNAMARA, President of the Royal College of Surgeons, visitors, expressing their regret, on various grounds, that they were unable to attend.

The REGISTRAR proceeded to call the roll of the Collegiate Body; the President, Vice-President, the Professors and officers, and a large number of the students answered to their names.

The PRESIDENT explained to the visitors that the Medical Session having terminated on the 1st of the current month the great majority of the medical students had returned home, and that consequently many of that class had not answered to their names when called.

The VISITORS inquired of the President as to the condition of the College since the last visitation.

The PRESIDENT replied that he believed the state of the College would be found to be satisfactory. The zeal of the Professors and the efficiency which they had given to their several departments of instruction deserved, in his opinion, the full approval of the visitors. The conduct of the students had been also very good, but few infractions of discipline having occurred, and of those but two or three had required the notice of the College Council. In one case of that kind the judgment of the Council had been appealed from, as unduly severe, and would come under consideration. With regard to the numerical returns of classes and students for the three years that had elapsed since the last Visitation, the President submitted the following return, which had been prepared by the Registrar.

NUMBER of STUDENTS on the ROLL of QUEEN'S COLLEGE, CORK, during the three years ending 1869-70, according to FACULTIES.

1867-8.

	Matriculated.	Non-matriculated.	Total.
Arts,	66	2	68
Law,	15	–	15
Medicine,	140	10	150
Engineering,	28	–	28
Total,	249	12	261
There were attending more than one Faculty,			14
Number of students on the roll,			247

1868-9.

	Matriculated.	Non-matriculated.	Total.
Arts,	47	5	52
Law,	10	–	10
Medicine,	140	16	156
Engineering,	27	7	34
Total,	224	28	252
There attended more than one faculty,			8
Number of students on the roll,			244

1869-70.

	Matriculated.	Non-matriculated.	Total.
Arts,	51	1	52
Law,	7	2	9
Medicine,	154	19	173
Engineering,	29	2	31
Total,	241	24	265
There attended more than one faculty,			13
Number of students on the roll,			252

NUMBER of STUDENTS on the ROLL, according to RELIGIOUS DENOMINATIONS for the three years ending 1869-70.

1867-8.

	Matriculated.	Non-matriculated.	Total.
Catholic,	107	4	111
Church of England,	110	8	118
Presbyterian,	7	–	7
Wesleyan,	8	–	8
Other denominations,	3	–	3
Total,	235	12	247

1868-9.

	Matriculated.	Non-matriculated.	Total.
Catholic,	89	8	97
Church of England,	107	18	125
Presbyterian,	11	1	12
Wesleyan,	6	1	7
Other denominations,	3	–	3
Total,	216	28	244

Appendix L.

Report of the proceedings of the Triennial Visitation.

1869–70.

	Matriculated.	Non-matriculated.	Total.
Catholic, . .	83	11	94
Church of England,	122	12	134
Presbyterian, .	7	1	8
Wesleyan, . .	11	–	11
Other denominations,	5	–	5
Total,	228	24	252

The VISITORS inquired if the Vice-President or any of the Professors or officers wished to add anything to what the President had said, or wished to make any complaint.

The VICE-PRESIDENT, PROFESSORS, and OFFICERS intimated that they did not.

The VISITORS inquired if the Deans of Residences wished to make any remark.

Rev. Dr. WEBSTER, Dean of Residences for Students of the Church of England, said that he appeared before the Court in reference to a matter in which he said he felt strongly interested, because he took the deepest interest in the welfare of the College, with which he had the honour to be connected as one of the Deans of Residence. His application was that the Visitors direct the Council to grant a room in the College in which the Deans of Residence representing the different creeds included on the roll, might at such hours as should be appointed by the Council, catechise and give religious instructions to the students of their several denominations. He made the application on his own behalf, and on the part of his brother Deans of Residence. Dr. Webster repeated at length the arguments in favour of his application advanced by him on the last visitation, observing that he was not going to discuss the desirability of having a purely secular system of education or not. He held strong opinions on that subject—he believed it to be injurious to have a purely secular system. The College was unjustly charged with being a godless college, the fact being that ample provision was made by the State to afford full religious instruction to the members of every religious denomination in the establishment. Dr. Webster said the provision of the new charter, which set forth that Deans of Residence should have the moral care and spiritual direction of the students of their respective denominations, and that the Council should have power to appoint rooms in the college for the purpose of affording religious instruction, and said the granting of the application would remove an evil from which many students had suffered, on account of his (Dr. Webster's) inability to report favourably of their character when questioned on the point—inasmuch as under existing arrangements the Deans had not such an opportunity of making the acquaintance of the students as would enable them to supply the necessary information. If the provision of the charter which he had read were to be taken as optional, not imperative, it would appear as if Government had established a purely secular institution in the city of Cork, leaving it to the Council to say whether or not religious instruction should be given as well as secular. He believed for his part the interests of the College would be materially served by the granting of the request which he sought not for himself, but hoped to see shared by the other deans.

The Rev. Mr. BEST, Dean of Residences for the Wesleyan Communion, heartily endorsed all Rev. Dr. Webster had said with respect to religious education. The principle adopted in the National schools, and which worked so harmoniously in our Model School, was that which might be introduced into the College.

Rev. Dr. MAGILL, Dean of Residences for the Presbyterian students,

feared that if Rev. Dr. Webster's request were granted it might lead to rivalries and dissensions, the risk of which it were better to avoid.

The PRESIDENT, in replying on behalf of the council, said that body had always felt deeply the desirability of the students being afforded the fullest opportunity for the proper fulfilment of their religious duties, and of receiving such religious instruction as would be conformable to their age or station, and had co-operated with the Deans of Residence in endeavouring to secure that object, and with such success, that the moral condition of the college was such as might be emulated by any ecclesiastical establishment in the country; the students having never been guilty of any dereliction in the matter of morality. The Council did not regard the application as very pressing, and having obtained the opinion of the present Chancellor and of Mr. Justice Lawson that the provision of the charter was not compulsory, guided also by the fact that the number of students in the licensed boarding-houses was comparatively small, had negatived the application, on the grounds that it might be a means of introducing into the college an element of dissension, which in the hands of the present Deans of Residence would not occur, but which might hereafter create a sort of ill feeling, and further that it would be a serious interference with the arrangements of the Council to make a provision from the want of which, owing to the arrangements for religious instruction carried out by the Deans of Residences in the town, the students did not practically suffer any great disadvantage. The Council were furthermore affected in their decision by the technical point that the Deans of Residences had no *locus standi* as officials of the college.

Dr. WEBSTER.—We do not ask to have these rooms set apart for our exclusive use; we ask only that an hour or half an hour be set apart in each week where the clergymen of each persuasion may lecture to and catechise the members of their respective creeds.

Professor READ denied that under the Statutes the Deans of Residence had any *locus standi* which would enable them to appeal to the Visitors, and said the result of granting the application would be to interfere with that provision of the Statutes which excluded religious tests, inasmuch as the person appointed to give religious instruction in the place assigned would have to be approved of by the Bishop or Moderator of his own communion. He did not think the refusal to form such an office was a grievance, and said it was in the discretion of the Council to grant or reject the request of the Deans of Residence.

Professor RUSHTON should wish to guard against being regarded as applying coercion to the religious education of any student, for the great principle of the institution was that of religious liberty. He should like to know whether, as a member of the Council, he might be called on to apply pains and penalties to any student for neglect of religious instruction? If so, he should feel himself in a very painful position.

THE MASTER OF THE ROLLS.—We are of opinion that by the statutes this is a matter vested in the Council for the exercise of their discretion, and we believe the view taken by the Council in the exercise of that discretion, is right. We think, having regard to the mode in which the statutes are worded, and to the clear distinction drawn between the words of command and the words of discretion contained in it, that it is not intended to force the Council to assign these lecture-rooms, if in their discretion they think fit not to do so. We think great reason exists for vesting this matter in the Council. They have exercised their discretion wisely and honestly. We are clearly of opinion the utmost pains are taken to apprise the parents of every student in reference to this subject, and we have no reason to believe that the religious instruction of any student in the College is neglected.

Appendix L.

Report of the proceedings of the Triennial Visitation.

The VISITORS then asked if any student had any complaint to make. The Visitors had received notice of some appeals by students against sentences passed by the College Council. The Visitors would now proceed to hear those appeals. Mr. Hamilton Williams was called.

Mr. WILLIAMS came forward and said that he rose on his own behalf on an appeal from a decision of the Council of the Queen's College, Cork. That decision was embodied in a resolution which was passed at a meeting of the Council held on January 25th, and which was communicated to him on the evening of the same day through the Assistant-Registrar. That on the occasion in question the chairmanship was assumed by the Vice-President, Dr. Ryall, and in the absence of the ordinary official Registrar the duties of that office were discharged by the Professor of Natural Philosophy. The note communicating the resolution was as follows :—

"Queen's College, Cork, January 25th, 1870.

"SIR,—I am directed to forward to you a copy of a resolution of the College Council, passed on this day.

"I am, sir, your obedient servant,

"JOHN ENGLAND, Acting-Registrar."

The following was the resolution :—

"Resolution of the Council of the Queen's College, Cork, passed at a meeting held on the 25th January, 1870. Resolved—That Mr. Hamilton Williams, first year's student in Arts and Law, be rusticated for the period of two years from the present date, for a grievous offence against college discipline in addressing a most unbecoming letter to the Vice-President."

Mr. WILLIAMS then submitted two questions for the consideration of the Visitors :—first, whether any conduct of his justified the charge instituted ; and, secondly, if so, whether the punishment inflicted did not far exceed and outproportion such offence. He also complained of the unfairness of his trial, and proceeded at considerable length to lay before the Visitors the circumstances under which he wrote the letter, and particularly relying on the fact (as he alleged) that, shortly before he wrote the letter to the Vice-President, the latter had, when lecturing a class to which he, Mr. Williams, did not belong, and in his absence, made use of expressions reflecting unfavourably on him. The facts of the case are so fully set out in the judgment of the Visitors, delivered by the Master of the Rolls, hereinafter given, that it is unnecessary to repeat them here.

THE MASTER OF THE ROLLS.—You stated to the Visitors that Dr. Ryall had made observations as to you in a class to which you did not belong, and in your absence—have you any evidence of that?

Mr. WILLIAMS.—I have, my lord.

THE MASTER OF THE ROLLS.—Then produce it.

FOUR STUDENTS then came forward, and being examined by the Master of the Rolls, deposed in substance to the fact that Dr. Ryall, when lecturing a class to which Mr. Williams did not belong, and in his absence, reproved a student of the name of Dwyer, saying "he was no credit to Dungarvan, neither was his friend Hamilton Williams."

The VISITORS asked the Vice-President and the Council whether they had any observations to make.

Professor READ replied on behalf of the Council, and explained that the offence of Mr. Williams being a grave violation of college discipline, the Council had the power under the statutes of inflicting the penalty of expulsion, and that the sentence actually passed was considered after full and calm inquiry into the case, to be not more than was required for the proper maintenance of discipline in the college.

Dr. RYALL explained that in saying that Mr. Williams was not a credit

to Dungarvan he had not meant any offence, and that the words had really been used more jocularly than otherwise. He had been specially asked by Mr. Williams's father to look after his son's conduct in college, and he had been thanked by him for having done so, and that he had no other object than the welfare of Mr. Hamilton Williams himself.

THE PRESIDENT OF THE COLLEGE in reply to the Master of the Rolls, explained the effect that the rustication for two years would have on Mr. Williams, depriving him of all fees and prizes, and preventing his studying in the institution in the term at which the fixed period of banishment would cease.

The Members of the Visitation then retired, and after a short absence returned into the hall.

THE MASTER OF THE ROLLS announced the result of their deliberations. He said—In the cause of the appeal against the decision of the Council on the 25th January last, by which Mr. Hamilton Williams has been rusticated for two years from the date, for "grievous offences against college discipline in addressing a letter to the Vice-President," I have been requested by the Visitors to deliver their unanimous judgment. This sentence has been founded upon the 15th chapter of the statutes, which treats of serious offences against the college rules and discipline. The letter which Mr. Williams has been so punished for, is dated the 20th January, 1870, and is in the following words:—

"Queen's College, Cork.

"SIR,—Permit me to inquire as to the accuracy of a report at present circulated all over the college, to the effect that you had in class this day sneeringly alluded to me as a credit to Dungarvan. For my part, sir, I have carefully avoided giving credence to the statement that a remark escaped from a dignitary of the college, at once improper, insolent, and undignified.

"I am, sir, your obedient servant,

"HAMILTON WILLIAMS."

This letter was written and addressed to Dr. Ryall, the Vice-President of this College. Now, in considering this letter, it was right to give attention to several matters that preceded it, and which appear to be very free from controversy. Mr. Williams was a student of the Queen's College, Cork, for some time before the date of this letter, and was attending the lectures in the faculties in which he elected to study. Mr. Williams's attendance at those lectures was not as satisfactory as Dr. Ryall wished, and he appears to have remonstrated with him, and to have written to his father on the subject. They were clearly of opinion that Dr. Ryall was actuated by the best motives in taking that course. It is of the utmost advantage to the students attending an institution of this sort, that their attendance at lectures should be looked closely after by the professors who instruct them, otherwise they may become indifferent to them; and he could not conceive anything more desirable in connexion with the college, than that the professors should exercise to some extent a paternal care over those persons attending their lectures, by reminding them of their duty, so that they should not lose the great advantages offered to them. With reference to the point advanced in Mr. Williams's statement, that the Council was not vested with the power to compel the attendance of students at lectures, they would not decide that matter, as it was not formally before them, but, judging from the present state of facts, as laid before them, they thought it most desirable that such a supervision should be exercised. Dr. Ryall and Mr. Williams up to a certain time appeared to be placed in amicable relation towards each other, but when Dr. Ryall had communicated with his friends, Mr. Williams objected, very naturally, a young man at his time of life, wishing to be free from control. They considered that there was nothing blamable in Dr.

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Ryall's conduct, with regard to his communicating with Mr. Williams's father, on the contrary it showed a continued interest in Mr. Williams's prosperity and advancement, which was highly creditable to Dr. Ryall. Again, though they were of opinion that Dr. Ryall had no motive but the best, in mentioning the name of Mr. Williams, in class before the students, still they believed that it was very imprudent, considering that Mr. Williams was not present. With respect to what occurred on that occasion, there is fortunately no controversy, and it speaks strongly for the students of this college, that four young gentlemen came forward to state before the Court what occurred. In their opinion, these students adopted a manly and fair course. It was a material point to take into consideration (in looking at the letter sent to the Vice-President) the observation that was made in class, for though the writing of such a document was by no means to be defended, it was an important fact in mitigating the circumstances of the charge, and it was highly commendable that Dr. Ryall did not on the investigation press the charge with any undue severity against Mr. Williams. As to what occurred on that occasion, no doubt Mr. Williams' name was mentioned in an unauthorized manner, and Dr. Ryall may have done so with the best intentions. They could not conceive how it was the duty of a professor in rebuking any of the other students to introduce the name of a person who did not belong to that class, when that party was absent. The letter written by Mr. Williams stated identically almost what occurred, but Mr. Williams had that day in his statement inserted the word "disgrace," which was very different indeed from what was really stated. They were willing to make every allowance possible for the writing of this letter, and the circumstances under which it was written. They had done so, but they were clearly of opinion that this letter of Mr. Williams was subversive of all discipline. In justice to Mr. Williams and Dr. Ryall they were anxious fully to state the view they took. Dr. Ryall's conduct did not justify the writing of such a letter, or adopting such a means of getting an explanation (a view which Mr. Williams had suggested). The letter, they had no doubt, was of an insulting character, no man ever wishes to get an explanation who writes an insulting letter to the gentleman from whom he is supposed to seek it. Mr. Williams, in his statement, said that he calls him a gentleman in the letter. They would rather he had not made that observation, because any person reading that letter, they had no hesitation in saying, must naturally come to the conclusion that any gentleman having respect for himself, such as Dr. Ryall, must have felt deeply offended. They could not conceive that that was a letter that Mr. Williams would have written if it were an apology he intended. They believed that, acting on the spur of the moment, nettled at the remark that had reached his ears, annoyed that Dr. Ryall had mentioned his name in the way mentioned, he wrote the letter, and would not, perhaps, have indited it in such strong terms if he had taken time for more mature deliberation. It is above all things essential that discipline should be maintained in an institution like this, and the students themselves are more interested than the professors or president in having discipline maintained. They have won their position in life. They have not to struggle for a position like the students who were only commencing their career, or preparing for the difficulties which they must encounter, and were laying the foundation of a character in life, which when accomplished by perseverance and energy, is sure to lead them to advancement and fortune. Every person is proud to hear of the students of this college winning a position in other parts of the world, a position in life bringing credit on themselves, and adding lustre to the city whence

they came. It was the students of the college that were most interested in having discipline maintained. If the Council passed over this letter and considered it no offence, they did think, taking into consideration the whole circumstances, that it would be a very great mistake, and anything but conducive to the maintenance of order and that respect which is due to the college authorities. With respect to Mr. Williams's allegations, that a fair trial had not been given, there was no foundation for that statement. Before the Council the letter was put into his hand, and he was asked was he the writer. He declined to acknowledge it. He said he was not bound to answer. If he said he wanted time for his defence he would have got an opportunity of explaining the reasons that induced him to write it; they rightly considered he was the writer, and dealt with it accordingly. They commended the moderation with which Mr. Read had addressed the court, and the absence of any desire on the part of the Council or Dr. Ryall to press the case severely on Mr. Williams. The Council had contented themselves with stating the facts of the case and upholding their jurisdiction without exhibiting the slightest desire to press it unduly. Dr. Ryall's statement had done him great credit, though he had been very warmly assailed. Mr. Williams had a right to assail him warmly, for every one who conducted his own case must be allowed a certain licence, but they would say that although he was so assailed he replied in a calm and creditable manner. During Mr. Williams's intercourse with him in the college, it appears he never went farther than a simple remonstrance when he considered that he neglected his studies. It was their opinion that there was no hostility or ill-will evinced in his conduct towards Mr. Williams, they thought it was a very proper matter for the consideration of the Council that Dr. Ryall was only performing his duty as Vice-President of the college in calling attention to what he considered a serious breach of discipline. If Mr. Williams had asked for time it would have been granted, and the Council would doubtless have made allowance for hot temper, and have taken into consideration those mitigating circumstances which would have been probably elicited if Mr. Williams was enabled to make a statement such as he had made that day before them. They were of opinion that the Council had acted very properly in inflicting punishment where a breach of discipline was proved to have been committed. But to be deprived of the great advantages of that institution for two years together, with the consequences that would follow, was to their mind too heavy an infliction for such an offence as that committed. It virtually amounted to punishment for three years, besides pecuniary losses. They knew the heavy load which a young man must bear when rusticated, even though that rustication was not for a breach of honour or a violation of gentlemanly conduct. They had taken that matter into consideration. While they approved of the conduct of the Council and that of Dr. Ryall, they thought that six months from the date of the letter would have been sufficient punishment. They did not wish to have it understood that it should be regarded by the students of the college as a triumph in any sense. They believed that the Council of the college were quite willing to abide by their decision. They had fuller information of the circumstances under which the letter was written than the Council had, and that explained why they were now reducing the sentence. They had agreed that six months' deprivation of the privileges of that college from the date from which the letter was written was sufficient punishment. They would wish to have it go forth from this court that the discipline of the college and its government should be upheld. They hoped when Mr. Williams would return to the college he would assume the same relations which once existed between himself and Dr. Ryall, and that no

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animosity would result from this proceeding, and that he would yet become a distinguished member of the Queen's College.

Mr. ROBERT ALLEN appealed to the visitors against the decision of the Council, by which he was deprived of a scholarship in Law, to which he submitted he was entitled. In December, 1868, he was admitted a candidate for the second year's scholarship in law, and was awarded twenty-five marks more than any other candidate; but on the day of the award of scholarships by the Council he found that Mr. Butler was declared the successful candidate, on the ground that he (Mr. Allen) had not complied with the rule which prescribed that no student should be entitled to become a candidate for a scholarship or prize until he should have paid all his class-fees for the current session, on or before the day previous to the examination. He respectfully submitted that though there was such a rule, it was habitually disregarded, and had virtually been superseded by the customary practice of students paying the fees on the day of examination if they had not done so before. On the day of examination he tendered his fees to the steward, who had been in the habit of receiving the fees; but he refused to take them from him, telling him that he had been directed not to receive any more money. The fees were also refused by the Registrar and one of the professors on the day of examination, and they were actually paid to the Bursar the following morning, and a week before the announcement of the result of the examination. Having quoted a number of cases in proof of the practice prevailing at the time in the college, Mr. Allen submitted that the rule had in reality been waived; and that having complied with the custom which had taken its place, he was legally entitled to the scholarship. In the following session the Council recognised the inefficiency of the former rule, by adding to it a further provision, that the student should not only pay his class fees on or before the day previous to the examination, but should get a certificate to the effect that he had done so, before he could become a candidate for a scholarship, &c.

The COUNCIL did not dispute the facts stated by Mr. Allen.

THE MASTER OF THE ROLLS said the Visitors were clearly of opinion that Mr. Allen was entitled to the scholarship, since he had been admitted a candidate. Had he been excluded from the hall on the ground of not having paid his fees, it might have been difficult for him to have carried the appeal.

Mr. JOHN GEORGE COLLIS made an appeal against a decision of the Council refusing him a scholarship in Law, on grounds similar to those in the previous case. This case, however, had occurred subsequent to the promulgation of an amended rule as to the payment of fees.

THE MASTER OF THE ROLLS said the Visitors regretted they could not decide in favour of the appeal; but they recommended the Council to grant the appellant compensation by way of a special prize. They suggested that the rule be further amended, so as to remove all ambiguity.

Mr. ALFRED DANN, B.A., expressed to the Visitors the desire of the students for the establishment of a gymnasium in connexion with the college; and that a public grant of money be obtained for the purpose.

The VISITORS recommended the application to the attention of the President and Council.

Sir ROBERT KANE said the object was very desirable, and the Council quite agreed with the policy of getting the grant.

The MARQUESS of KILDARE then expressed the satisfaction of the Visitors at the condition of the College, and the proceedings terminated.

DUBLIN: Printed by ALEXANDER THOM, 87 & 88, Abbey-street,
For Her Majesty's Stationery Office.

Digitized with financial assistance from the
Government of Maharashtra
on 26 June, 2018